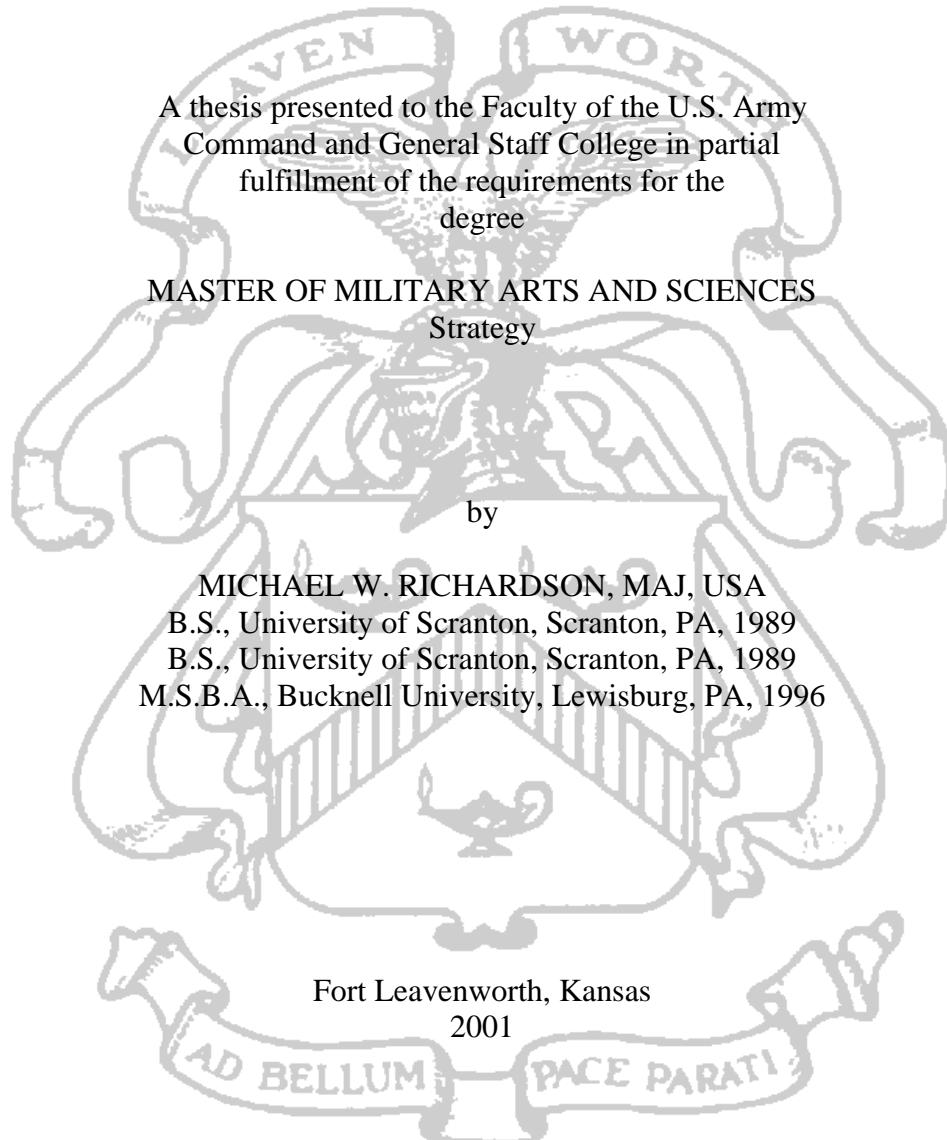


FORCIBLE ENTRY AND THE GERMAN
INVASION OF NORWAY, 1940



A thesis presented to the Faculty of the U.S. Army
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fulfillment of the requirements for the
degree

MASTER OF MILITARY ARTS AND SCIENCES
Strategy

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MICHAEL W. RICHARDSON, MAJ, USA
B.S., University of Scranton, Scranton, PA, 1989
B.S., University of Scranton, Scranton, PA, 1989
M.S.B.A., Bucknell University, Lewisburg, PA, 1996

Fort Leavenworth, Kansas
2001

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THESIS APPROVAL PAGE

Name of Candidate: MAJ Michael W. Richardson

Thesis Title: Forcible Entry and the German Invasion of Norway, 1940

Approved by:

_____, Thesis Committee Chairman

Marvin L. Meek, M.S., M.M.A.S.

_____, Member

Justin L.C. Eldridge, M.A., M.S.S.I.

_____, Member

Christopher R. Gabel, Ph.D.

Accepted this 1st day of June 2001 by:

_____, Director, Graduate Degree Programs

Philip J. Brookes, Ph.D.

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ABSTRACT

FORCIBLE ENTRY AND THE GERMAN INVASION OF NORWAY, 1940, by MAJ Michael W. Richardson, 106 pages.

The air-sea-land forcible entry of Norway in 1940 utilized German operational innovation and boldness to secure victory. The Germans clearly met, and understood, the conditions that were necessary to achieve victory. The central research question of this thesis is: What lessons concerning setting the conditions for present day forcible entry operations can be gleaned from the successful German invasion of Norway in 1940? Forcible entry is the introduction of an aggregation of military personnel, weapons systems, vehicles, and necessary support, or a combination thereof, embarked for the purpose of gaining access through land, air, or amphibious operations into an objective area against resistance. This aggregation of military force attempts to set conditions that cripple the enemy's ability to react decisively to, or interfere with, the forcible entry operation. The German emphasis on surprise and speed, an effective psychological campaign, and combined operations under a unified command in the invasion of Norway rendered the Norwegian and Allied intervention forces (including the Royal Navy which dominated the seas in the area) incapable of seriously interfering with the German forcible entry.

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CHAPTER 1

INTRODUCTION

In the spring of 1940 the German military conducted a successful combined air and amphibious invasion of Norway, securing that country in less than two months. They did so in spite of the fact that Great Britain's navy (the world's foremost naval power) was based within one day's steaming of the area and the British fleet outnumbered and outclassed Germany's navy. The air-sea-land joint operation was the first of its kind in modern war, and the results of the campaign had far-reaching effects on the conduct of World War II by Britain, France, and Germany.

To the Allies, the most immediate political effect of the Scandinavian activity was the fall of both the French and British governments. British Prime Minister Chamberlain, believing that he did not have the confidence of the government to prosecute the war due to his handling of the early portion of the campaign in Norway, resigned on 10 May 1940, the same day the Germans invaded the Low Countries. Winston Churchill succeeded him as Prime Minister¹ and ably guided Britain's war effort through the World War. The French Chamber of Deputies voted Premier Daladier out of office before the campaign even began, due to his failure to prosecute aggressively the war with Germany. His government's inactivity concerning Scandinavia during the Russo-Finish war contributed to his fall. The new Premier, Paul Reynaud, was considered a man of action by the Chamber of Deputies and an opponent of Daladier, but was forced to retain the former Premier as the Minister of War for political reasons. The enmity engendered by this situation did not bode well for the future defense of France.

The British and their allies also measured the cost of the campaign in men and equipment. Losses in men stood at 1869 British, about 530 French and Polish, 1335 Norwegians (not counting prisoners), and about 2500 of all nationalities lost at sea.² Aircraft losses stood at 112 machines (some of these were lost when German surface ships sank the British carrier *Glorious* late in the campaign.)³ In addition to the *Glorious*, the British lost two cruisers, nine destroyers, six submarines, and three transports.⁴ The losses incurred in the destroyer force exacerbated the shortage of merchant escorts already being felt in the Atlantic convoy battles. The loss of the almost irreplaceable carrier (Britain went to war with only four modern fleet carriers and three obsolete models) also weakened the ability of the British to project naval power in the Atlantic or Mediterranean. The heavy equipment and supplies abandoned by the British ground forces during the evacuation of the country would have been welcomed in the Mediterranean Theater or in home defense of the British Isles following the fall of France.

Germany gained three advantages with the victory in Norway. First, Germany secured her northern flank by rendering a British occupation of Norway impossible. Second, Germany secured the route of the Swedish iron ore so important to the German war economy, and third, Norway offered naval and air bases from which to strike at Britain. The psychological blow to Allied morale of a successful invasion in the face of the Royal Navy would also be significant. Germany accomplished these gains with slight losses to their air and ground forces. During the campaign the Germans lost 5,660 men, 120 combat aircraft, and eighty air transports.⁵ These ground and air losses had little effect on the further course of the war, as the Germans were still able to concentrate the ground

and air forces needed to defeat France even as the Norwegian campaign continued. The most significant losses were among their naval surface fleet. The loss of three cruisers, ten destroyers, and eleven transports, along with severe damage to two battle cruisers, a pocket battleship, and two cruisers eliminated the navy as a factor in future German strategic planning.

How did the German military manage to project successfully military power into Norway, given its naval inferiority and the difficulties of applying combat power in a forcible entry? Although the state of military technology has advanced since World War Two, lessons learned by the Germans concerning setting the conditions for a forcible entry are still valid. As today's United States military must be able to conduct forcible entry operations in order to execute the National Military Strategy, these lessons have applicability to present-day missions. In order to understand these lessons, an understanding of the rudiments of forcible entry operations, as framed by today's requirements and doctrine, is necessary.

The US National Military Strategy, derived from the National Security Strategy, has shifted the focus of the US military from the Cold War reliance on forward-deployed forces to a flexible strategy based on responding to potential regional crisis by rapidly projecting combat power from the continental United States. In order for this power projection paradigm to be credible as a deterrent and as a viable warfighting option for policy enforcement, our forces must be able to deploy and may have to fight to gain access into the selected geographical area.⁶ During the Cold War, rapid deployment was valued as a reinforcement of forward forces, not as a means of gaining access to a denied area.

The shift in focus to power projection operations has elevated the problem of force entry (the act of moving forces into an area of operation) to the forefront. Force entry is classified as either an administrative deployment or a forcible entry. An administrative deployment is an unopposed introduction of US forces. This type of deployment depends upon access to secure forward bases in the crisis area.

In contrast to the permissive environment of an administrative deployment, a forcible entry is defined as “seizing and holding a military lodgment in the face of armed opposition.”⁷ A lodgment, when seized, will allow the continuous landing of troops and material to achieve immediate objectives or provide a base for subsequent operations. A lodgment may be an airhead, a beachhead, or a combination of the two.

The scope of a forcible entry operation may range from the initial phase of a campaign or major operation, a major operation within a campaign, or a coup de main where a single major operation achieves the strategic and/or operational objectives.⁸ A coup de main uses one swift stroke counting on surprise and simultaneous execution of supporting operations to strike directly at enemy centers of gravity. Forcible entry operations can also be classified as concurrent or integrated. Concurrent operations occur when combinations of entry capabilities are conducted simultaneously as distinct operations with separate operational areas and objectives. Integrated operations employ these entry capabilities simultaneously within the same operational area and have objectives that are mutually supporting.

All forcible entry operations regardless of their scope or classification share basic functional components as operations. These functional components are command and control, operations, logistics, synchronization, and transition. The manner in which the

Germans structured their forcible entry operation to address these components is outlined in the second chapter of this thesis. These components are discussed in detail below.

As forcible entry operations require full use of joint capabilities, they will normally occur under the theater CINC's combatant command authority, and will normally be executed by a joint force commander.⁹ Special planning relationships exist during the planning phase of this type of operation to ensure that land, air, special operation, and naval force considerations are adequately addressed in the final plan. The joint force commander may designate operational areas or joint areas to coordinate the actions of the joint forces during the operation. Examples of these coordination measures are areas of operation and amphibious objective areas. Communication systems and plans must be reliable, interoperable, and timely.¹⁰

Forcible entry operations are usually planned and executed in five phases: Preparation and deployment, Assault, Stabilization of the Lodgment, Introduction of Follow-on Forces, and Transition Operations. Planning is conducted using the policies of the joint operation planning and execution system (JOPES), and is usually time-sensitive due to military and political considerations. Planning must consider intelligence (to include counterintelligence) as the commander uses these products to decide when, where, and how to attack. Also critical are information operations (IO), which involve actions taken to affect adversary information and information systems while defending one's own information and information systems. Information warfare is IO conducted during time of crisis or conflict to achieve specific objectives.¹¹ Information warfare elements include operations security, intelligence support, psychological operations, military deception, and public affairs, among others.

Logistics preparation and execution enable the movement and sustainment of forces from preparation to the conclusion of the operation. This requires forcible entry planners to establish a logistic system for follow-on forces as well as assault units. The rapid build-up of combat power is critical in forcible entry operations and can be accomplished only through a complete concept for logistics.

A successful forcible entry should terminate in one of two ways: attainment of the objectives, or completion of initial objectives whereby a lodgment is established for follow-on forces.¹² In either case, the initial assault forces must transfer control to other authorities or follow-on forces by conducting detailed planning and utilizing strong liaison staffs.

Within the complex framework of forcible entry, the initial assault is the most difficult and crucial element. Before conducting a forcible entry, a force attempts to set conditions that favor the assault. Accomplishing these conditions cripples the enemy's ability to decisively react to, or interfere with, the forcible entry operation during the initial assault.¹³ The favorable conditions for operational success are discussed below.

The entry force must achieve surprise in some degree before and during the operation. At the least, the force should attain tactical surprise as to the exact objectives, times, methods, and forces employed in the operation.¹⁴

Achieving control of the air is necessary to protect the force during particularly vulnerable periods and to preserve a line of communication. At a minimum, local air superiority must be attained over the planned lodgment. Control of the sea must be maintained to enable projection of ground combat power ashore and to protect the sea line of communication.

The force conducting the entry must isolate the lodgment area from enemy forces that have the capability to affect that area. Those enemy ground, air, and sea forces, along with related command and control systems must be neutralized in some manner by the joint force. Obviously, the entry force must also accomplish the neutralization of enemy forces within the proposed lodgment.

A force conducting forcible entry must manage environmental factors to attain favorable conditions. These environmental factors include planning to overcome the effect of purposeful contamination of the environment by the enemy, as well as countering the effects of climate, weather, and other natural effects on the friendly force.

Finally, psychological and civil affairs operations must be integrated into the plan. Integrating these functions into the concept of operations helps the joint force to protect noncombatants, minimize collateral damage, and preclude civilian interference that may hamper friendly units.

As can be gathered from the short preceding section concerning forcible entry doctrine, these operations are complex and joint in nature. Why did Norway bear the brunt of such an operation when Germany's primary attention was centered on the coming decisive battle with France? What did Germany hope to gain? Why were the Allies unable to prevent those gains? Examining these questions is crucial to understanding the background of the German invasion in 1940, and in extracting lessons from that successful operation.

¹James Butler, *Grand Strategy* Vol. II (London: Her Majesty's Stationary Office, 1957), 144-145.

²Thomas K. Derry, *The Campaign in Norway* (London: Her Majesty's Stationary Office, 1952), 230.

³James L. Moulton, *A Study of Warfare in Three Dimensions* (Athens: Ohio University Press, 1967), 260.

⁴Robert Gennette, "Weserubung: The Effects of the Norwegian Campaign Upon the German Navy" (San Diego: San Diego State College, 1972), 220.

⁵Moulton, 259.

⁶United States Department of Defense, JP 3-18 (Preliminary Coordination), *Joint Doctrine for Forcible Entry Operations* (Washington: Chairman of the Joint Chiefs of Staff, 2000), vii.

⁷Ibid., I-1.

⁸Ibid.

⁹Ibid., I-3.

¹⁰Ibid., II-10.

¹¹Ibid., ix.

¹²Ibid., xi.

¹³Ibid., III-1.

¹⁴Ibid.
¹⁵

CHAPTER 2

BACKGROUND OF THE INVASION OF NORWAY

Understanding the context in which *Weserubung* (the code name eventually given by Hitler to the forcible entry operation in Norway) was executed provides a necessary background to the operation as it evolved and the number and type of forces engaged. Following the capitulation of Poland in the fall of 1939, Germany quickly shifted most of its forces to the western front, facing France, Holland, Belgium, and Luxembourg. Delays in German preparations and the lack of good flying weather caused the postponement of the invasion date for the Low Countries and France to the early part of May. Hitler believed this lull in operations in the west might give the Allies time to occupy Norway, threatening the northern flank of Germany. Germany would forestall this move by mounting an operation to capture the country.

At the beginning of the Second World War the northern European states of Norway, Sweden, and Finland declared their intent to remain neutral in the conflict. Several events threatened this Norwegian neutrality. The first event that drew the attention of both the Allies and the Germans to these countries was the invasion of Finland by Russia in November 1939. The British saw in this action a possible opportunity to intervene in the Russo-Finnish war by moving troops by way of Norway and Sweden into Finland. This action by the Allies would deprive Germany of Swedish iron ore that was crucial to her armaments industry.¹ Germany's need for iron from Sweden in the first year of the war

was estimated at 9,000,000 tons (750,000 tons monthly); almost half of the Swedish tonnage came by way of the year-round ice-free Norwegian port of Narvik (fig.1).² The Swedish ore ports were ice-bound in the winter months and did not have the capacity to supply all of Germany's ore needs. Norway's neutrality was important to the Germans as it provided for safe passage to skirt the British naval blockade in order to obtain this iron ore. The British had, in September of 1939, already considered using floating mines in the neutral Norwegian waters to interrupt the flow of iron. This proposed action was openly debated in the British press.

Germany was concerned that the Finnish intervention would provide the Allies with a pretext to violate the neutrality of Norway. By introducing troops into Narvik, and the possibility of moving forces along the rail through Sweden to Finland, the British could successfully cut iron ore delivery to Germany. In December 1939, Hitler learned that the British were proposing an operation to lend assistance to Finland along this particular line of operation.³ Because Hitler wanted to concentrate all resources on the coming invasion in the west, he initially did not want to commit the resources necessary to counter this possible operation. Norwegian neutrality protected the ore traffic more effectively than could German military means, and at no cost to the German forces. However, Germany reluctantly began planning a counter to this move by the British. The end of the Finnish war in March 1940 voided British plans for intervention, but both antagonists continued their planning activities.

In February 1940 the British Navy breached the Norwegian neutrality by boarding a German ship in neutral Norwegian waters. This event accelerated German planning for a move in Norway. This incident convinced Hitler that Norway could not or would not

maintain her neutrality. Interestingly, the British drew the same conclusion from the affair, which lent some legitimacy and impetus to their plan for a naval minefield in neutral Norwegian waters.⁴ The German tanker *Altmark*, returning to Germany with British seaman aboard who had been captured during the commerce raiding operations of the pocket battleship *Graf Spee* in the South Atlantic, was detected by a British air patrol in Norwegian waters. The ship fled into *Josing* Fjord near Kristiansand upon detection, and the Norwegian authorities assured the British no prisoners were aboard. The British demanded the right to search the ship themselves, but the Norwegian government denied the request. A British Navy destroyer, forcing its way past escorting Norwegian torpedo boats, deposited a boarding party on the *Altmark* and seized the ship. The action in neutral waters resulted in the liberation of 300 British prisoners and the deaths of four members of the German crew in the fierce hand-to-hand struggle.⁵ This event and the Allied interventionist planning during the Russo-Finish war convinced Hitler that Norway would have to be occupied to protect Germany's northern flank.⁶

A forcible entry of Norway by the Germans would be both helped and hindered by the country's geography. The Kingdom of Norway featured a long, heavily indented coastline and shared a common border with Sweden. The length of this coastline seemed to make the country difficult to defend from seaborne incursions, but the relative lack of major port facilities and the placement of population centers recessed from the coast (accessible only by narrow fjords) restricted suitable points of debarkation for large bodies of troops. Narrow valleys flanked by dominating, rugged high ground characterized the interior of the country. This interior terrain ensured the population and manufacturing centers would be accessible to attack from the sea. These centers included

Oslo (the capital), Trondheim, Stavanger, and Bergen. The twisting roads following interior valleys were easily defended with minimal forces, as long as defending forces could secure their flanks. These easily defended restricted routes also favored an attacker wishing to isolate an area under attack.

The primary method of strategic movement in the theater of operations was by sea and air transport. Movement by coastal craft was the primary means of transport both between the northern and southern portions of the country and along the cities on the coast. Sola airfield, near Stavanger, was the largest and best equipped in Norway, with the other major airport, Fornebu, located near Oslo.⁷ The major population centers also had smaller airfields in their vicinity. None of these airfields was able to accept large numbers of aircraft without modification. Operationally, rail lines, in addition to sea and air methods of transport were available in the country (fig. 2). Rail lines linked major population centers in the southern and central regions of Norway, but no rail lines connected the northern portion of the country with the south and the lines that did exist were easily interrupted by hostile action. At the time of the invasion, most of the roads were clear of the spring snows. The countryside was another matter, as skis and snowshoes were required to traverse the terrain with any degree of efficiency and speed. Both attackers and defenders needed proper equipment to maintain freedom of tactical maneuver in this environment.

Illumination was also a concern. As summer approached, the period of darkness each night became shorter and shorter, a challenge for concealing long distance naval movements, but an advantage for the use of airpower. The Germans would occupy Denmark concurrently with the invasion of Norway to maximize this advantage. From

captured Danish airfields German planes could operate in and around the country and keep the British Navy from interdicting the Skagerrak, and supporting allied landings in southern Norway. This move would also bar British access to the Baltic Sea. The German strategic aim in the operation against Norway was to prevent British occupation of the country in whole or in part. A British occupation would interrupt sever the flow of iron ore to Germany and provide the opportunity to project a naval presence from southern Norway into the Baltic. Hitler explained these facts to General Falkenhorst, the ground commander of the invasion, during an interview prior to the operation: “In the Baltic sector, Germany had very few troops. The coast lay undefended without artillery or fortifications [...] By crossing the Baltic, the British [...] could make their way to Berlin, to the very heart of Germany.”⁸ Churchill, the First Lord of the Admiralty, was, in fact, interested in this concept and directed a study to determine the feasibility of a special squadron of converted battleships forcing passage into the Baltic to operate in those waters in order to threaten Germany from the north.⁹

The perceived threat to Germany’s northern flank was heightened through contact with a German sympathizer in Norway. In December of 1939, Admiral Raeder, the CINC (commander in chief) of the German navy, met with Vidkun Quisiling, a Norwegian sympathetic to Germany (the leader of the Norwegian National Union Party), and former Minister of Defense of Norway.¹⁰ Quisling informed Raeder that a secret agreement existed between the British and Norwegian governments that, should Britain and Germany go to war, the Norwegians would permit the British to build a base near Kristiansand, on Norway’s southern coast. There was no agreement between the Norwegians and the British, but the Germans did not know that fact for certain.¹¹

Prevention of a British occupation would result in economic gains (ensure the flow of iron ore to Germany), and would require the surrender of the Norwegian armed forces and the expulsion of any Allied troops in Norway, along with the establishment of a German puppet government to administer the conquered country. The occupation of the country had additional benefits as well. The German Navy recognized the value of Norwegian ports to submarine and surface ship campaigns against the British Navy in the Atlantic and Norwegian air bases could be used by the *Luftwaffe* to attack the northern portion of the British Isles. Hitler's order to complete the plan included the following statement: "This operation will prevent British encroachment in Scandinavia and the Baltic; further, it will guarantee our ore base in Sweden and give our navy and air force a wider start-line against Britain."¹²

In order to accomplish the strategic aim and the economic, military, and diplomatic components, the theater military objective was the defeat of the Norwegian military forces. This defeat could be brought about in several ways. By occupying the country rapidly with few forces, the Germans could convince the government that resistance was impossible, and win a quick victory. Alternately, by entering with overwhelming combat power, force of arms could force surrender on the government. A third course was a combination of the two. Any option required the ability to secure lodgments in the country from the distant German bases. The need for a forcible entry operation was apparent to accomplish this theater military objective.

In developing a campaign plan, the primary focus is to strike at the enemy strategic center (or centers) of gravity. The center of gravity is "the hub of all power and movement, on which everything depends."¹³ The Germans determined the center of gravity at the

strategic level in the invasion of Norway were the Norwegian mobilization centers. Their entire plan revolved around securing the majority of these centers simultaneously all across the country. If these concentrations of weapons and munitions were denied to the Norwegians before they could be distributed, the small standing army and any mobilized units would be unable to resist an invasion. The mobilization plan and disposition of Norwegian forces is discussed below. Decisive points are those points which, if retained, provide a commander with a marked advantage over his opponent. Decisive points are usually geographic in nature.¹⁴ Occupation or seizures of decisive points allow a force to strike at the enemy centers of gravity. In this case, the decisive points were first, the ports in the major population centers that contained the mobilization points, and second, selected airfields. The Germans realized these decisive points would be needed to land troops to secure the mobilization depots. The ports and airfields, once seized, afforded the ability to strike at the Norwegian and British centers of gravity. The German center of gravity that had to be protected was the ability to transport forces and supplies by sea and air against the opposition of the British Royal Navy and Air Force.

The German ground troops earmarked for the invasion were units that could be spared from the coming decisive campaign in France. Six divisions were assigned to the invasion, with only one (the 3rd Mountain Division with two regiments) having seen action in Poland. The 3rd Mountain Division was fully trained and equipped for snow and mountain warfare; the rest were newly formed units with no special training. Other units assigned to Group XXI (the designation of the German ground force headquarters) included a provisional battalion of tanks raised from armor training centers, two railroad construction companies, six additional artillery batteries, three parachute companies, and

three antiaircraft battalions (the last two contingents under air force control).¹⁵ In all, these troops totaled 73,000 men, but only 8,000 of those would land in the initial assault at widely divergent points. These forces were effective out of proportion to their numbers due to a high degree of cooperation between the air force and ground elements and the synergistic effect of the combined arms team. An additional force of two divisions and a motorized brigade would overrun Denmark on the day of the invasion.¹⁶ The German Navy had the most difficult assignment of the invasion; insert the assault troops in the face of superior enemy sea power. To accomplish this task, the navy would commit its entire operational surface force to the campaign: two battle cruisers, seven cruisers, 14 destroyers, and a number of transports and auxiliaries.¹⁷ Crucial for the employment of ground forces and protection of the warships was the German air force. *Fliegerkorps X* was a self-contained air unit task-organized to support the invasion. The numbers of aircraft available by type included reconnaissance (40), bombardment (both horizontal and dive bombers, 330), twin and single-engine fighters (100), naval reconnaissance (30), and transport (both conventional and seaplane type, 500).¹⁸ Trained in anti-shipping strikes and operating from captured airfields very near the area of operation, this force would dominate the skies over central and southern Norway.

German contingency planning for the invasion of Norway began, at Hitler's instruction, in November of 1939, based on the recommendation of Admiral Raeder. The planning was initiated by the high command of the German Army, the *Oberkommando der Wehrmacht* (OKW), and within a month, a summary of the military and political factors of a Norwegian invasion were considered. This summary was named *Studie Nord*.

During this period the Germans began to consider the possibilities of conducting reconnaissance in Norway through the use of their military attachés, OKW intelligence agents, Norwegian sympathizers led by Quisling, and special air reconnaissance. Hitler ordered the plan held in the operations section of OKW until further orders. In early January, *Studie Nord* was released to the service commands, and the naval staff worked out an expansion to the study. Later that month, Hitler ordered the study recalled from the service commands. All further planning was to be conducted at OKW with a staff consisting of army, navy, and air operations officers under Hitler's personal guidance. This was due to the inherent character of the entry (necessarily a coordinated sea-air-land operation), and a desire on Hitler's part to ensure coordination among the services on the project.¹⁹ The plan was code named *Weserubung*.

The *Weserubung* special staff, under the direction of Captain Krancke of the German Navy, produced a workable operations plan in three weeks. This was no mean feat, as military experience of the Germans provided no precedent for the operation. In order to maintain strict secrecy, the staff had to rely on intelligence provided by hydrographic charts, travel guides, and other sources, in addition to a small amount of intelligence concerning the Norwegian forces and installations. The plan identified six strategically important areas: the region around Oslo Fjord, including the capital, the narrow populated coastal strip of southern Norway from Oslo to Stavanger, Bergen and its environs, the Trondheim region, Narvik and the rail link to Sweden, and Tromso and Finmark in the far northern portion of Norway. All but the last contained mobilization depots in their vicinity.

The staff did not recommend a specific command arrangement, but indicated that half the troops involved would move by air and half by sea, while the air force provided bomber and fighter support. Operationally, they recommended simultaneous landings to capture the first five areas, disregarding the last area as the two airfields located there were not a direct threat due to their distance from Germany, being located above the Arctic Circle. The Allies could introduce only short-range fighters into the airstrips by flying them off aircraft carriers, and the Germans hoped their newly established air power in the Trondheim area would keep the British carriers at bay. Capture of the first five areas, which included the major mobilization centers, would deprive the Norwegian Army of eight of their estimated sixteen regiments, and nearly all of its artillery and airfields.²⁰ A small force of paratroopers would seize the two major airfields of Sola and Fornbeu and allow follow-on troops to land by air transport. The staff felt that the landings would be followed quickly by a diplomatic solution favorable to Germany. Such a solution could be reached in the face of the German occupation of the major strategic points of the country and an inability or unwillingness of the Norwegians to resist.

The Krancke staff also made the initial arrangements for logistics for the invasion. Heavy equipment for the invasion forces, carried in transports camouflaged as ordinary cargo ships, would position themselves in the target harbors prior to the day of the invasion. The first wave of the invasion forces, unburdened by heavy equipment, could then move primarily in warships, possessing the speed to ensure the synchronized landing of troops under the cover of darkness at distant points in Norway. To secure the sea and air lines of communication from Germany to Norway, military pressure would be brought

to bear on Denmark, to gain permission from the Danes to use the excellent airfields in the Jutland peninsula.

The Altmark incident in February caused Hitler to turn planning, and eventually execution, of *Weserubung* over to a corps staff. After meeting with General Falkenhorst of XXI Corps, Hitler decided he would command the invasion and directed him to develop and present his concept of the operation.²¹ Falkenhorst added the military occupation of Denmark as a part of the plan and began task organization of forces (fig. 3). The operation was also modified to allow it to be executed independently and shortly before the invasion of the Low Countries and France. On the 1 March, *Fuehrer* Directive authorized operational planning, with Falkenhorst directly subordinate to Hitler. Hitler designated 9 April 1940 as *Weser* day.

The Norwegian armed forces were ill prepared for war in 1940 due primarily to cost cutting measures instituted over the previous decade. The army, the largest branch of service, consisted of a small regular cadre and a national army that would be raised upon mobilization. That army would number six divisions, based on the six command districts in Norway. These divisions were based as follows: 1st Division (Halden, southeast of Oslo), 2nd Division (Oslo), 3rd Division (Kristiansand), 4th Division (Bergen), 5th Division (Trondheim) and 6th Division (Harstad, northeast of Narvik).²² Within each of the six districts, a Brigade Group was the militia unit with the greatest degree of readiness. Within a few days of mobilization, these Brigade Groups would be available for action.²³ Training in general was inadequate, but the men were fit from their civilian occupations. The equipment centers to support this mobilization were located within

cities. The total non-mobilized strength of the army was about 13,900 men at the time of the invasion.²⁴

Contrary to the army, the Norwegian Navy was mobilized at the outbreak of war. However, the force of sixty-two warships contained only a handful built after 1918, including four large torpedo boats and six submarines.²⁵ Manning of the coastal forts protecting the sea entrances to the major population centers was only one-third strength, with authority to mine the approaches retained by the government. The Norwegians believed the Germans would be unable to launch an invasion in the face of allied supremacy at sea.²⁶ The air component was split between the navy and army and consisted of 115 planes, none of them modern designs.²⁷

The planning priorities of the Norwegian armed forces prior to the German invasion were: defense against a Russian attack on Narvik, possibly aided by Swedish troops; and defense against enemy landings in the principal ports of the country. The former priority was guarded against by the mobilization of a Brigade Group of the 6th Division (around Narvik), and positioning it north of the port on the Swedish border on “neutrality watch.” Oslo, Lillehammer, Kristiansand, Stavenger, Bergen, and Trondheim each had a battalion mobilized for training.²⁸ The naval forts guarding the entrances to the harbors were given orders to open fire immediately on ships or aircraft violating the neutrality of the country (with the exception of British craft).²⁹

Cognizant of the poor state of their defenses, the Norwegians relied on strict adherence to the rules of neutrality to protect their borders. If this course failed, the British could be counted upon to intervene with their more powerful military forces, as the relations between the two countries were excellent.

British and French strategic aims for the Scandinavian region grew out of wish to strike at Germany through the periphery of Europe rather than in a frontal assault against Germany proper. This caused some fantastic plans to be forwarded in the period of the “Phoney War.” One dealt with bombing the Russian oil fields from the Middle East, another was action in the Balkans, while yet another espoused the mining of the Rhine River by air to close the waterway to industrial traffic. These were advanced along with the aforementioned plan to intervene in Finland. The allies soon agreed in principle that the aim of the operations in Scandinavia would be to cut the ore supplies from Sweden and outflank Germany to the north. Diplomatically, the allies wished to foster an anti-German sentiment in the governments of Norway and Sweden by goading the Germans into actions violating Scandinavian neutrality. Access to bases gained in Scandinavia by such German action would allow the economic blockade of Germany to be tightened.

The British and French land forces available for employment were troops originally intended to render aid to the Finns by landing in neutral Norway and proceeding to Finland along the ore railway. They consisted of eight British and six French infantry battalions, about 14,000 men, which comprised the following units: British 49th Infantry Division (the division was never employed in Norway as a headquarters, just the 146th and 148th Infantry Brigades from the organization), British 24th (Guards) Brigade, 15th Infantry Brigade, and the French Chasseurs Alpins demi-brigade.³⁰ Only some of British battalions were available to depart for Norway on the day of the invasion. Some had been disembarked without their equipment (such as mortars and radio sets) from Royal Navy warships to clear those units for surface action only days before. On 7 April, a British plane spotted some of the German warships bound for Trondhjem and Narvik.

The British thought the German ships sighted were making a break for the Atlantic, and wanted every surface combatant available to intercept the attempt, and so unloaded the troops in all haste, throwing the units into confusion.³¹ In reality, those German ships carried the troops that would invade Norway.

Not only were many British troops unavailable for immediate deployment to Norway, but their organization and equipment were suited primarily for disembarkation into a friendly port; they carried no artillery, no tanks, no motor transport, and had no air support allocated. The assumption was that these troops would comprise a garrison to forestall German landings in Norway, and so would not need heavy equipment. The priority for replacements for both the British and the French was to units in France.

The training level of most British troops for the Norway expedition was also low. The 49th Division, although augmented by 24th (Guards) Brigade, a regular army unit, was short an organic brigade and made up entirely of Territorial troops. These Territorials had never trained together as battalions, let alone as brigades, and little was done in the way of preparing them for the conditions they would encounter in Norway. Most had been split in order to expand the British Army, with predictable results in unit training and cohesiveness.³²

The British and their allies (France and Polish units raised from Poles living in France and abroad at the time of that country's surrender to the Germans) counted command of the sea as their primary strength. Air patrols and submarines in the area of Denmark were expected to detect German warships attempting to breakout into the Atlantic through the arctic waters. The British Home Fleet units sailing from northern Britain would engage and destroy those ships. The Home Fleet at this time numbered two

battleships, one battle cruiser, six cruisers, and numerous destroyers.³³ Off the coast of Norway proper, the Germans could expect to find only one or two British cruisers on station if the surprise of the operation could be maintained.³⁴ On the day before the invasion, only twenty Royal Navy warships (including a single battle cruiser) were within supporting distance of the Norwegian coast, along with nineteen submarines in the waters north of Denmark.³⁵ Most of these were involved in minelaying operations. As Britain would not land a military force without total control of a sea area, they assumed the Germans would not do so either, and so did not keep a large number of ships on standing patrol off Norway. In fact, the British Chiefs of Staff considered the idea of any seaborne operation against the western sea-board of Norway could be “dismissed as impracticable” in light of the British control of the sea.³⁶

Lack of air cover handicapped the Allied forces in Norway. Airplanes operating from bases in Britain flew to the extreme limit of their range to operate over the Norwegian coast, and could afford no support to the ground forces due to the extended range of operation. Late in the campaign a few RAF squadrons managed to operate from makeshift airfields (the Germans had seized all the large aerodromes), but were neutralized almost immediately by the overwhelming German air superiority. The few carrier aircraft were outmoded types, unable to provide air defense for ground troops on a continuous basis or properly defend debarkation areas.

The British campaign plan for Norway was titled Operation *Wilfred* and had an associated plan named R-4. *Wilfred* provided for three minefields (two actual and one dummy) in the neutral waters along the Norwegian coastline in order to interfere with German ore transport routes or force them to the open sea where they could be

intercepted. The Home Fleet would provide distant cover for this operation. A military ground expedition (plan R-4) would stand ready to capitalize on German reactions to the mining by occupying Narvik, Trondheim, and Bergen when “the Germans set foot on Norwegian soil, or there is clear evidence they intend to do so.”³⁷ The establishment of British minefields was a breach of Norwegian neutrality and actually started only one day before the German invasion.

This chapter has covered why the Germans felt the need to execute a forcible entry operation in Norway, how the terrain in that country supported that type of operation, and the objectives, forces, and plans of the invaders. Equally important to the understanding of the forcible entry is the understanding of the opposing forces objectives, strength, and plans. In the following chapters we will examine the operation in detail by citing examples of the Germans of setting the conditions for forcible entry operations.

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¹Monte R. Hill, “Operation Weserubung: Valuable Lessons in Joint Warfare” (Newport, RI: Naval War College, 1994), 5.

²James Butler, *Grand Strategy* Vol. II (London: Her Majesty’s Stationery Office, 1957), 91.

³The British and French were very interested in gaining a foothold in Scandinavia under the pretense of aiding the Finns. The British were planning three separate operations to gain this foothold in early 1940. The initial plan Avonmouth, envisioned landing two divisions in Narvik and then proceed into Sweden to secure the ore fields, and then perhaps into Sweden. To secure the rear of this force, a force of five battalions would land in central Norway to secure the ports of Stavenger, Bergen, and Trondheim as part of plan Stratford. Finally, to help the Norwegians defend the southern portion of the country in case of German reaction, the British would land two divisions at Trondheim to cooperate with Norwegian force. The plan was named Plymouth. Francois Kersaudy, *Norway 1940* (London: Collins, 1990), 25.

⁴Ibid., 28.

⁵William Shirer, *The Rise and Fall of the Third Reich* (New York: Simon and Schuster, 1960), 679.

⁶This was not the only indication of possible Allied designs in Scandinavia. In the latter half of January, 1940, the Hamburg *Abwehr* station received a report that the *Chasseurs Alpins* (a French mountain troop unit) was withdrawn from the Metz sector of the western front in order to move to Britain for subsequent operations in Scandinavia. Paul Leverkuehn, *German Military Intelligence* (New York: Praeger, 1954), 83.

⁷Military Intelligence Service, *The German Campaign in Norway* (Washington: United States War Department, 1942), 7.

⁸Kersaudy, 45-46.

⁹This plan, named “Operation Catherine” involved removing the main armament of several old battleships and reequipping them as anti-aircraft platforms. This flotilla would be accompanied by supply ships and would force the Danish straits into the Baltic. Robert Gennette, “Weserubung: The Effects of the Norwegian Campaign Upon the German Navy” (San Diego: San Diego State College, 1972), 32

¹⁰Vidkun Quisling had a remarkable career prior to the intrigue surrounding the invasion. His grades at the Norwegian military academy were the highest ever granted by that institution. Serving in Russia following the First World War, he was decorated by the British government for his efforts on the part of the White Russians in their fight against the communist forces of Red Russia. His political party, the *Nasjonal Samling* (National Union) was virulently anti-Communist. Kurt Singer, *Duel for the Northland* (New York: Robert M. McBride and Company, 1943), 69-70.

¹¹Gennette, 35.

¹²Thomas K. Derry, *The Campaign in Norway* (London: Her Majesty’s Stationery Office, 1952), 18.

¹³United States Army. JFM 101-5-1, *Operational Terms and Graphics* (Washington: Government Printing Office, September 1997), 1-24.

¹⁴Ibid., 1-46.

¹⁵Ibid., 62.

¹⁶Earl Ziemke, *The German Northern Theater of Operations* (Washington: Department of the Army, 1959), 33.

¹⁷Ibid., 27-28.

¹⁸Ulrich Kessler, Military Study B-485, *The Role of the Luftwaffe in the Campaign in Norway, 1940* (Historical Division, US Army European Command, 1946), 5.

¹⁹Ziemke, 14.

²⁰Ibid., 27.

²¹Hitler told Falkenhorst to report back to him with a plan to use the divisions allocated to the invasion. Falkenhorst left the interview and went directly to a bookshop to buy a Baedeker (a tourist guide) of Norway. He presented his concept to Hitler after a few hours work. His concept matched that of the Krancke staff. Kersaudy, 46.

²²Ziemke, 15.

²³James L. Moulton, *A Study of Warfare in Three Dimensions* (Athens: Ohio University Press, 1967), 124.

²⁴Military Intelligence Service, 2.

²⁵Moulton, 125.

²⁶Ibid., 126.

²⁷Military Intelligence Service, 2.

²⁸Moulton, 129.

²⁹ Kurt Assmann, *The German Campaign in Norway: Origin of the Plan, Execution of the Operation, and Measures Against Allied Counter-attack* (London: Tactical and Staff Duties Division [Foreign Documents Section], Naval Staff, Admiralty, 1948), 19.

³⁰These figures indicate the scale of the original operation envisioned for Norway. The actual campaign saw the commitment of eleven British and twelve French and Polish rifle battalions. Derry, 62, 262-267.

³¹Bernard Ash, *Norway 1940* (London: Cassell, 1964), 41.

³²Derry, 63.

³³Assmann, 17-18.

³⁴Kent Greenfield, *Command Decisions* (Washington: Center of Military History, 1987), 58.

³⁵Moulton, 69.

³⁶Butler, 93.

³⁷Derry, 13.
³⁸

CHAPTER 3

SETTING THE CONDITIONS: CONTROL OF THE SEA AND AIR

Control of the sea and air during a forcible entry operation is fundamental to the success of the operation. Ports and airfields in and adjacent to the area of operation will be the basis of entry and supply for a military force conducting a forcible entry. Troops and equipment in transit by either sea or air are vulnerable to destruction without ever having the chance to attain their goals. The responsibility to establish and maintain control of these mediums to avoid waste of troops and supplies falls on the shoulders of the joint planners.

Control of the sea supports the United States military's ability to project power ashore by establishing control in every maritime area, subsurface, surface, and airspace, in both open ocean and littoral regions of the world. This control allows the force to protect sea lines of communication, deny the enemy commercial and military use of the seas, establish an area of operations for power projection ashore and support of amphibious operations, and protect naval logistic support to forward deployed battle forces.¹ This control is not absolute; it is the ability to control the region in question for a specified period to allow unhampered maritime operations. The U.S. Navy concept for these types of operations is called battlespace dominance.² Examples of some naval operations that support this concept include destroying or neutralizing enemy ships, submarines, aircraft, and mines, as well as the land-based infrastructure that supports enemy sea control

forces. The entry force can disrupt the command and control systems of the opponent, or conduct a barrier operation in a choke point that prevents enemy movement under, on, or above the sea.³ The German actions during the forcible entry of Norway used methods similar to all these naval operations, and some of the techniques employed were the first of their kind ever attempted in warfare.

Neutralizing enemy ships and aircraft is one obvious method of gaining battlespace dominance. In the forcible entry of Norway, the German navy did not have the ability to neutralize the ships of the much larger British Royal Navy with its own surface combatants. The Germans planned to overcome their surface combatant weakness by committing their entire surface fleet and using a mix of airpower and submarines to neutralize the small Norwegian forces and the superior British Navy. The British and Norwegians assumed that landings could not be made without control of the sea granted by the large surface units of the Home Fleet, an assumption reinforced by the short distance to Norway from the British Home Fleet base at Scapa Flow-less than twenty-four hours steaming.⁴

The plan to lift six divisions to Norway would have required more than a half-million tons of transport conveying those forces in an orthodox manner. In addition, the collection of the fleet, even had Germany been able to raise such a fleet, would have clearly signaled the invasion to the Norwegians and British.⁵ Instead, the Germans decided to transport the initial assault troops in warships. Therefore, regardless of fighting ability or speed, the German Navy employed every vessel for protection or transport. The resulting fleet did not possess the speed, range, and firepower required for such an operation. Admiral Raeder explained this limitation to Hitler in these terms:

This operation runs counter to all the lessons of naval warfare, which indicate it would only be justified if we possessed the necessary sea power, and this is not the case. On the contrary the operation will have to be carried out in the face of the greatly superior British Fleet. I believe, however, that given complete surprise the dispatch of troops can and will succeed.⁶

However, the fleet concentration was able to influence the action in a substantial manner. British air patrols detected the group of ships bound for Narvik (the battlecruisers *Gneisenau*, *Scharnhorst*, and ten destroyers with the assault troops on board) as they passed through the Skaagerak. The British immediately assumed these ships were attempting to breakthrough the British blockade into the Atlantic, and this impression was heightened when the cruiser *Hipper*, part of the group bound for Trondheim, fell upon and sank a lone British destroyer. The two battlecruisers themselves, after releasing the accompanying destroyers to land their troops at Narvik, proceeded into northern waters to divert British warships and there fought a running battle with the British battlecruiser *Renown*.⁷ Convinced by these events that a breakout was in the making, the British disposed their fleet to block the effort. This action deprived the Norwegian coast of Royal Navy coverage for the time needed by the Germans to land their troops and establish lodgments. At Narvik, the German destroyers landing the invasion troops destroyed the two largest Norwegian coastal defense vessels with torpedo fire. Several smaller Norwegian patrol craft were sunk by gunfire or surrendered to naval escorts during the landing operations in the southern portion of Norway.

As mentioned earlier, *Fleiger Korps X* provided the aviation forces for the invasion of Norway. *Fleiger Korps X* was formed in the early months of 1940 from *Fleigerdivision 10*.⁸ *Fleigerdivision 10* had existed since the start of the war to specialize in anti-shipping strikes and had carried out some long distance bombing raids against the British

Fleet bases at Edinborough and Scapa Flow. However, the unit had poor training and equipment to fill that role at this point of the war. The crews had no adequate training in reconnaissance work over the sea, the bomb sights in use did not permit precision bombing, and the development and production of aerial torpedoes had been cancelled by Hitler personally on the advice of Goering.⁹ This limited the damage inflicted on the British warships during the campaign. But the continuous action of the *Luftwaffe* caused the British to abandon naval operation in the southern portion of Norwegian waters, and was decisive in cutting the movement of supplies from ship to shore for the allied ground forces landed near Trondhjem. Within a few days of landing, the local allied commanders decided the position was untenable in the face of the unchallenged *Luftwaffe* activity.¹⁰ *HMS Suffolk*, a British cruiser ordered to bombard Sola airfield on 17 April in order to divert attention from the impending landings near Trondheim, returned to Scapa Flow with her prow almost blown off from German dive bombers.¹¹ The British sank the largest combatant ship sunk during the invasion by aircraft. The light cruiser *Konigsberg*, already damaged by coastal artillery fire, was sunk in Kristiansand harbor by long-range British dive bombers operating from the northern British Isles.¹² Prior to the Norwegian invasion, the value of aircraft in neutralizing surface warships was unproven, but following the campaign the acting Chief of Staff of *Fleiger Korps X* made this statement: “The campaign in Norway, however, has proved that Sea Power alone is no match for Air Power whereas Air Power under certain conditions might establish control of the sea and make up for the lack of Sea Power.”¹³

The German use of submarines in the campaign also differed significantly from the historical role of the craft in the German Navy, which was attacking enemy merchant

vessels. In the Norwegian invasion, virtually the entire German submarine fleet (thirty-two of the forty-eight boats) was to cooperate with air and naval surface forces to attack Allied warships and troopships.¹⁴ These boats were to screen the Norwegian coast and operate around England to interdict traffic bound for Norway.¹⁵ In the event, the boats failed to influence the campaign, owing to difficulties in operation in the northern area such as shortened nights that barely afforded the submarines the required surface running time to charge their batteries, intense Allied anti-submarine efforts, and a torpedo failure rate as high as sixty-six percent.¹⁶ The last mentioned difficulty had the most to do with the overall failure of the boats, as major targets such as a battleship, numerous heavy cruisers, and large transports were attacked at ranges and target aspects that almost guaranteed torpedo hits. These targets, and others, escaped damage because of faulty torpedo mechanisms.¹⁷ Six of the boats were used to resupply the lodgments at Trondheim and Narvik; the former destination received three submarine loads of aviation gasoline.¹⁸

Another manner in which the Germans attempted to gain control of the sea around Norway without directly confronting the British Navy was by securing all the land-based sea infrastructure (ports), thus denying their use to the Allies for naval support or landing operations. Coastal artillery forts defending the entrances to these major ports, although antiquated, still commanded the port entry points and posed a considerable risk to naval landing forces. Admiral Raeder expressed his view of the landings to seize the ports in this manner: “The critical moment occurs at the penetration past the coastal defenses into the enemy’s harbours. I believe that with surprise this will succeed and the Norwegians

will not decide on action with sufficient speed, if indeed they will ever decide to open fire.”¹⁹

As the German plan directed that the warships used for transport return to Germany immediately upon delivering their troops to avoid an Allied naval reaction, the Germans planned to seize coastal forts intact, if possible. These forts would then be manned by German artillerymen to defend against Royal Navy interference. Concerns over the status of these defenses caused the abandonment of a British naval strike at vulnerable German warships at Bergen, while the British discarded a direct landing at Trondheim for the same reason²⁰ Scant hours after Bergen had been seized, a German transport disguised as a lumber carrier delivered a cargo of naval mines that were immediately laid to protect the harbor.²¹ These measures, along with air support, would preclude the action of Allied naval forces against the captured ports.

The Germans occupied Narvik by 0810 on the morning of 9 April. Earlier that morning, the German force of ten destroyers dispatched by the battlecruisers *Gneisenau* and *Scharnhorst* arrived off the entrance to the fjord, and two of the ships landed troops to seize supposed fortifications that guarded the entrance to the harbor. These forts did not exist, although several batteries had been delivered to Narvik in 1912, but were never mounted due to lack of funds.²² Consequently, the German plan to use these sites to protect German naval units in the port was impossible. This error contributed to the loss of the entire force to British counterstrokes later in the campaign. The capture of Narvik will be discussed in detail later in this work.

The landings at Trondheim encountered less initial resistance than the Germans experienced at Narvik. The shore batteries guarding the harbor managed only one volley

before the German assault ships dashed by at high speed. The warships of the group disembarked their infantry at the docks with no interference. The Germans secured the city by nightfall.

The landings at Stavanger, Bergen and Kristiansand were free of significant ground opposition, but the alerted naval shore batteries made the operations difficult for the German Navy at the latter two locations. At Bergen, the light cruiser *Koenigsberg* was severely damaged passing the harbor entrance forts prior to ground troops seizing those positions, was unable to put to sea after the port had been taken, and was later sunk at dockside by British dive-bombers. The British Admiralty ordered a detachment from the British Home Fleet consisting of four cruisers and seven destroyers to attack the German naval units reported at Bergen, but the attack was cancelled for fear the captured shore batteries were operational (they were not at this time). At Kristiansand, the naval force called for an aerial bombardment of a shore battery that it could not silence using naval gunfire.

On the seaward approach to Oslo, the Germans were having less success. Attempting to run the series of coastal forts defending the long, narrow entrance to the port of Oslo, the leading light cruiser (*Bluecher*) of the group was struck several times by eight- and eleven-inch coastal gunfire and sank. On board *Bluecher* was the headquarters of the infantry division assigned to Oslo, as well as the element that was to seize the king and government. The naval group then withdrew in order to reduce the forts by ground attack supported by air bombardment. This was successful, but consumed the entire day. The naval force closed on the port the next day, after air-landed forces had captured the city.

The pocket battleship of the group, the *Luetzow*, sustained damage by a British submarine attack enroute back to Germany.

Another facet of the German attempt to control the sea around Norway was the use of deception measures to disrupt the command and control of the Norwegian naval defenses.

The invading warships used British ship names and signaled in English to confuse the Norwegian defenses at the critical moment of gaining the harbor entrances.²³ Examples of these instructions are found in the capture of Bergen. At 0200, searchlights from the coastal fortifications picked up the group of invading German ships as they passed the entrance to the fjord leading to Bergen. The forts challenged the vessels, whereupon the German cruiser *Koeln* made the signal identifying itself as the HMS *Cairo*. Upon some warning shots from the shore batteries, the *Koeln* made the signal, in English: “I am proceeding to Bergen for a short visit,” and the Norwegians took no further action until the ships stopped and began to debark troops to seize the batteries.²⁴ Contributing to this confusion were the directions from the government to the shore batteries not to fire upon British or French vessels.²⁵

Despite the measures taken by the Germans to insert their forces during the short period of sea control gained by unorthodox means, a longer period of control was necessary over the Skagerrak and Kaategat. This control would allow the transport of second echelon combat units and supplies to Oslo to reinforce the lodgments. The Germans planned to provide flank protection for these convoys by a combination of a submarine screen line, anti-submarine warfare vessels, and placement of minefields in the entrance to the Skagerrak to preclude entry of Allied forces. The Germans assumed that these measures,

coupled with the occupation of the Jutland airfields in Denmark, would secure the area for convoys moving north to Oslo.

In the event, the measures in the Skagerrak failed to clear the area prior to the movement of the warships and transport groups, and a large force of twenty-seven Allied submarines was in position to interdict the movement toward Norway. These submarines sank three of the fifteen transports bound for southern Norway, as well as two warships homeward bound to Germany. Losses among transports and tankers bound for the lodgments of Narvik, Trondheim, and Bergen reached almost 100%, as the barrier operation terminated at the southern tip of Norway. This left the transports bound Norwegian West Coast ports shorn of defenses past this point. The transport and tanker losses caused supply shortages among the initial assault troops and resulted in the destruction of the ten destroyers at Narvik, as the ships did not have enough fuel to escape the harbor prior to the British reaction.²⁶ These failures forced the Germans to rely on air resupply of the lodgments in the west, as well as utilize submarines as stopgap transports. Small, fast craft less vulnerable to submarine interdiction replaced the larger transports in moving troops across the Skagerrak into Oslo. Eventually, the Germans cleared the area of Allied submarines by a combined effort of the navy and air force.²⁷

Control of the sea is vital in inserting troops in a forcible entry operation, but control of the sea implies control of the air as well. Both are interdependent and necessary for forcible entry operations.

The United States Air Force has identified basic areas of expertise that the organization brings to any activity across the range of military operations, and has labeled these areas of expertise as core competencies of the Air Force.²⁸ These core competencies include

controlling the air over a designated area, termed air superiority. Control of the air provides freedom to attack as well as freedom from attack. Success in air, land, and sea operations depends upon air superiority.²⁹ Air power is multifunctional, and many different types of missions may be required of the force, but no diversion of air effort is prudent before securing some measure of air superiority.

Various degrees of air control are possible. Air superiority is defined as “that degree of dominance that permits friendly land, sea, and air forces to operate at a given time and place without prohibitive interference by the opposing force.”³⁰ Air supremacy is achieved when enemy air forces cannot effectively interfere with friendly forces anywhere in the theater of operation. Superiority, like control of the sea, is not absolute, but may be attained locally or even on a mission-specific case at a much lower cost than air supremacy. In order to accomplish this and other core competencies, the air force has delineated air functions.

Air functions are the “broad, fundamental, and continuing activities of air and space power.”³¹ These functions include counterair and counterland operations, strategic attack, and airlift, which are the air functions utilized in a forcible entry operation.³² Counterair operations attain and maintain a desired degree of air superiority by the destruction or neutralization of enemy forces.³³ Counterair can be offensive (proactive), or defensive (protective) in nature. Counterland involves those operations conducted to destroy or neutralize enemy surface forces in order to attain a degree of surface superiority.³⁴ Strategic attack is actions undertaken against vital target sets, including command and control elements.³⁵ Finally, airlift is defined as the transportation of personnel and material through the air.³⁶ A sample sequencing of these functions in a

forcible entry operation might be large initial use of counterair and air lift to insert forces, with limited strategic attack, and then, as air superiority is achieved, the use of the counterland function to support surface operations.

The German air operations in Norway closely followed the sequencing of air functions in forcible entry operations. Control of the air was the critical factor in the German invasion concerning the intervention of the Allies. Only by the use of air power could the Germans conduct strategic strikes at the British Navy, the Allied center of gravity. The counterair and airlift functions ensured the Germans could position forces to effectively strike at that target.

The rapid seizure of forward air bases was an important element of the attempt to gain control of the air. Not only would seizure of these fields in Norway and Denmark allow the basing of aircraft closer to the area of operation, reducing flying time, maintenance problems, and increasing bomb loads, they would also destroy any Norwegian aircraft located on the fields while denying the fields to the British. The last point is a crucial one, as any attempt to challenge the air control of the Germans in Norway would have to be made by short-ranged Royal Air Force fighters. Without local fields, British air support was limited to medium bombers flying at their extreme range limit, and a handful of obsolete Royal Navy carrier aircraft.³⁷ The largest and most modern airfield, Sola,³⁸ along with Fornebu outside Oslo, were selected as targets of an airborne assault, the first such attacks in World War Two.

At Sola airfield, located near Stavenger, the defenses consisted of two concrete machine gun posts and barbed wire obstacles on the runway. Six Bf-110 long-range twin engine fighters appeared over the airfield shortly after 0800 on *Weser Day* and destroyed the

only two Norwegian aircraft on the field, as well as bombing the machine gun posts. A company of parachutists³⁹ jumped onto the airfield shortly after the fighter attack and quickly seized the installation. Ten minutes after the paratroopers jumped onto the objective, two battalions of infantry began landing on the newly won field, carried by 180 aircraft.⁴⁰

In an operation similar to the seizure of Sola, but displaying much more audacity, the Germans landed at Fornebu airfield outside Oslo. Bombers and long- range twin engine fighters arrived over Oslo at dawn, and were intercepted by five Norwegian Gladiator bi-planes. Four German planes were shot down before two of the Norwegian planes were forced to land with damage and the rest driven off.⁴¹ The parachute company assigned to seize the airfield turned back due to a dense cloudbank, but the transports carrying the second wave of infantry that was to land on the field following the drop reached Fornebu. Norwegian anti-aircraft fire brought down three of the JU-52 transports and damaged four others.⁴² The commander of the leading battalion of the air-landing troops from the 163rd Infantry Division decided to land without the support of the parachutists. Under cover of eight ME-110 fighters scheduled to support the parachute drop, the planes touched down, receiving small arms fire from all sides. The German infantry rapidly deplaned and overwhelmed the anti-aircraft positions around the airfield. The eight German fighters, low on fuel, landed with the transports and used their rear gunners to cover the approach of the balance of the transports.⁴³ Defensive fire killed the lead battalion commander. In addition to aircraft damaged in the air fighting, the Norwegians also lost nineteen Curtis fighter planes, still in their crates following delivery from America.⁴⁴ The air transports unloaded 3,000 men in less than two hours.⁴⁵ During the

operation, 31 aircraft were lost to all causes, the bulk of this number lost to operational accidents.⁴⁶ This successful operation figured even more prominently in the campaign due to the difficulties encountered by the sea-borne assault units bound for Oslo in forcing the Norwegian forts guarding the capital city. When those forces failed to penetrate the coastal defenses as planned, the Germans at Fornebu hastily organized two parachute and six infantry companies⁴⁷ and boldly marched into Oslo behind an improvised military band, seizing the city of 300,000 by a demonstration.

Two other airfields in southern and central Norway were important to the German plans for air control. The invaders captured the small airfield at Kritstiansand with seaborne troops by the late afternoon of *Weser* Day and the airfield of Vaernes near Trondheim, the day after the invasion began. The capture of these airports precluded basing of British planes in southern and central Norway. In order to realize the advantage of these fields, however, the Germans had to occupy the captured facilities quickly. The German plans accounted for this factor.

The *Luftwaffe* was prepared to move into the captured fields on the same day they fell to the German assault troops. As none of the airfields in Norway (even Sola) were capable of large-scale air operations, the Germans formed a base services command to immediately upgrade the captured fields.⁴⁸ Named *Luftgaucommando Norwegen* (air force administration command Norway), its task was critical to allow insertion of German aircraft in Norway proper to counter British attempts to dispute German air control with carrier-based aircraft.⁴⁹ The invaders also employed expedients. At Trondheim, Vaernes airfield was too distant from the port to be seized on the invasion's

first day, so the Germans improvised a snow landing field for transport planes⁵⁰ and landed reinforcements in fourteen float planes in Trondheim harbor.⁵¹

By one week after the invasion, the *Luftwaffe* had the following air units in place in Norway. Lack of fuel due to supply ship losses hampered the operations of the two flights of seaplanes based at Trondheim. At Sola one heavy fighter squadron, one dive bomber flight, one reconnaissance, and one coastal reconnaissance flight were operational. Additionally, a fighter squadron (ME-109 short-range aircraft) was based at Kristiansand. At Aalborg in Denmark a fighter squadron and bomber group operated, reinforced by a bomber group based in Germany.⁵² These units were operational and well placed to protect the German lodgments (except Narvik, which was at the extreme range of even the bombers operating in Norway) from any Allied riposte.

Another counterair measure employed by the Germans was the use of extensive aerial reconnaissance to pinpoint British attempts to establish landing grounds for fighters on frozen lakes, and then bombing the surfaces to render them useless.⁵³ An attempt to operate a British squadron in this manner in the Trondheim area met disaster; within two days of arrival, the squadron had no operational aircraft left due to incessant German strikes on the frozen lake field.⁵⁴

Airlift was a critical component of German forcible entry to deliver forces to the surface of the area of operation. The importance of paratroops to the initial assault has already been discussed. The primary transport, the JU-52, was slow and vulnerable to interception, but the Germans managed to get fifty machines a day (with thirty troops in each) into Sola and Fornebu airfields following their capture.⁵⁵ To supply the lodgments, 582 *Luftwaffe* transport aircraft delivered 29,280 men, 2,376 tons of supplies and 259,300

gallons of gasoline during the campaign, a massive effort in 1940.⁵⁶ This effort was necessary to offset the loss of sea transports to the superior British fleet, especially to the lodgments on the western coast of Norway, and was made possible only by the control of the air established by counterair actions. British efforts to interfere with the airlift by bombing receiving airfields in Norway met heavy German fighter resistance and were ineffective.

Control of the air also enabled the Germans to conduct attacks at strategic targets. The effect of these strikes on the Royal Navy has already been outlined above. Two other actions of strategic air application were evident in the campaign: one operation intended to strike at the highest Norwegian command element and the other a decision to maintain the controlling air headquarters in a location to facilitate operations against the British.

During the course of 10 April, King Haakon and Foreign Minister Koht of the Norwegian government negotiated with German Foreign Minister Brauer concerning the formation of a new Norwegian government in order to end the fighting. The King and the government had narrowly avoided arrest on the first day of the invasion, and only the delay of the sea invasion force of Oslo had allowed them to flee to Nybergsund, a small community northeast of Oslo. The negotiations were doomed as Brauer insisted that the head of the new government be Quisling, a stipulation that was unpalatable to King Haakon. Nevertheless, the King would present the German terms to the government and inform the German Minister via telephone of their decision. Upon arriving in Nybergsund from the location of the meeting, the government decided to resist as long as possible and informed the German Minister of the decision.⁵⁷ The next morning a flight of German bombers struck the town and a nearby wood attempting to eliminate the

government. Amazingly, no one was injured, but the government would not exercise effective command and control of the Norwegian forces for the rest of the campaign in the light of its constant movement and insufficient communications.⁵⁸

The headquarters of *Fleiger Korps X* remained in Hamburg, Germany, in the early stages of this campaign. Correctly surmising that the threat to the landing was from Britain, not from Norwegian forces, the headquarters continued to use the excellent radio and British radio intercept facilities at that location to direct operations.⁵⁹ Only with superior communications could the actions of aircraft on various airfields in three different countries be synchronized in a common effort. The purpose of that effort was at times under debate in the German command system. Toward the latter stages of the campaign, General Falkenhorst wanted the air power concentrated on close support operations for the besieged German garrison at Narvik. The staff of *Fleiger Korps X* contended that the best way to assist the garrison was to maintain air superiority and use that superiority to keep the British fleet away from the port. They failed to sway General Falkenhorst or the command of *Lufflotte 5* (*Fleiger Korps X*'s commanding headquarters) and the air forces shifted their main effort to close support. This failure resulted in the British establishing two fighter squadrons at fields north of Narvik, and challenging the German superiority in the air.⁶⁰ Even considering this misuse of air power, the Germans achieved overall synchronization as several actions indicate.

The close support given the parachute and airlanding assaults has already been discussed earlier in this chapter. The *Luftwaffe* also provided invaluable fires to naval units attempting to reduce stubborn Norwegian coastal batteries. At Bergen, after landing their troops, the German cruisers *Koeln* and *Konigsberg* were taken under fire by two coastal

defense guns. Four HE-111 bombers appeared over the town, and together with fires from the warships silenced the battery. German troops captured the guns a short time later. The *Luftwaffe* also conducted demonstrations to awe the populace into surrender, a topic covered in a following chapter dealing with psychological operations.

The last area of application of air control to forcible entry operations is the actual support of troops in contact. The German troops (with the exception of those fighting around Narvik) were the beneficiaries of a complete and sustained air program meant to assist the forcible entry units. Only poor weather (such as ground fog), could curtail the German air support.

The most important support to the leading troops was the dedication of reconnaissance aircraft to those units. In the actions against the German Trondheim lodgment, the King's Own Yorkshire Light Infantry (KOYLI) battalion was visited each morning by a German floatplane nicknamed "George" by the unit. This plane dropped messages to German infantry regularly, plotting the exact routes taken by the British companies.⁶¹ Under such scrutiny, it was impossible for the Allies or Norwegians to achieve any degree of surprise in tactical operations.

Surprisingly, the bombing and strafing of Allied and Norwegian units did not cause high casualties. As the KOYLI moved to meet the Germans around Trondheim, a floatplane monitored their progress. The *Luftwaffe* subsequently mounted a bombing and strafing attack against the unit that was to last ten hours. Fire from the battalion's small arms and three attached Bofors guns brought down three aircraft, but the aircraft destroyed all three guns in the attacks. The bombardment resulted in only three KOYLI wounded,⁶² but the prolonged nature of the attacks coupled with the relative immunity of the attackers was

psychologically unnerving. British General Auchinleck said of the German air control “He [the enemy] used it first, to support his troops by low flying attack, by bombing [in the later stages by dive-bombing]. . . ”⁶³ The use of these low-flying airplanes to provide machine gun fire to cover the movement of troops was commonplace. The constant harassment from the air forced battalion and brigade headquarters to move frequently, interrupting command and control of the forces.⁶⁴ The deputy commander of *Fleiger Korps X* observed the following: “The Norwegian divisions in southern and central Norway surrendered under the psychological stress of complete impotence especially with respect to air rather than because of actual losses suffered from aerial bombardment or in action.”⁶⁵

Equally devastating as reconnaissance and bombardment to the Allied ground troops was the inability to protect their lines of supply from the *Luftwaffe*. At the landing sites to the north and south of Trondheim, the small ports used for supply were wiped out by concentrated bombing.⁶⁶ The hazardous conditions at the ports caused a shortage of urgently needed materials; some was lost, and some shipped back to England by mistake. This left the Allies short of munitions and completely lacking anti-aircraft and field artillery.⁶⁷ An attempt to provide anti-aircraft protection for the ports by stationing three anti-aircraft cruisers in the roads failed, as the ships used so much ammunition in self-defense there was little left to shield the bases.⁶⁸

In conclusion, control of the sea and air is fundamental to the success of a forcible entry operation. The coordinated effort of the German Navy and Air Force gave the invaders an unexpected capability to insert troops into Norway, confronting the Norwegian and Allied defenders with an attack they were ill prepared to meet. By utilizing air power

imaginatively to redress weaknesses in the German naval surface fleet, and mounting an aggressive air superiority campaign, the Germans managed to help create conditions favorable to the forcible entry.

¹United States Navy, NDP-1, *Operations* (Washington: Government Printing Office, June 1993), 26.

²United States Navy, . . . *From the Sea, Preparing the Naval Service for the 21st Century* (Washington: Government Printing Office, 1992), 7.

³United States Navy, NDP-1, 26.

⁴Ulrich Kessler, Military Study B-485, *The Role of the Luftwaffe in the Campaign in Norway* (Military Study B-485. Historical Division, US Army European Command, August 1946), 3.

⁵Thomas K. Derry, *The Campaign in Norway* (London: Her Majesty's Stationery Office, 1952), 19.

⁶Kurt Assmann, *The German Campaign in Norway: Origin of the Plan, Execution of the Operation, and Measures Against Allied Counter-attack* (London: Tactical and Staff Duties Division [Foreign Documents Section], Naval Staff, Admiralty, 1948), 5.

⁷Earl Ziemke, *The German Northern Theater of Operations* (Washington: Department of the Army, 1959), 28.

⁸Air Ministry of Great Britain, *The Rise and Fall of the German Air Force 1933-1945* (London: Her Majesty's Stationery Office, 1948), 58.

⁹Kessler, 18.

¹⁰Military Intelligence Service, *The German Campaign in Norway* (Washington: War Department, 1942), E-2.

¹¹Francois Kersaudy, *Norway 1940* (London: Collins, 1990), 135.

¹²Robert Gennette, "Weserubung: The Effects of the Norwegian Campaign Upon the German Navy" (San Diego: San Diego State College, 1972), 158.

¹³Kessler, 3.

¹⁴Clay Blair, *Hitler's U-Boat War* (New York: Random House, 1996), 145-148.

¹⁵Assmann, 9.

¹⁶Blair, 149.

¹⁷Ibid., 155.

¹⁸Ibid., 156.

¹⁹Naval Institute Press, *Fuehrer Conferences on Naval Affairs 1939-1945* (Trowbridge: Redwood Burn Limited, 1990), 86.

²⁰The seizure and use of these batteries was given considerable emphasis in the planning of the invasion. At Trondheim, limited transport space in the initial assault wave was given to coastal defense troops to man the captured batteries. Interestingly enough, although the Germans believed such fortification existed at the entrance to Narvik,

their landing forces there included no coastal artillery personnel. Historical Branch, Cabinet Office, *Notes on the Norwegian Campaign* (London: Her Majesty's Stationery Office, 1951), 23, 60.

²¹Louis De Jong, *The German Fifth Column in the Second World War* (Chicago: University of Chicago Press, 1956), 175.

²²Kersaudy, 11.

²³Derry, 20.

²⁴Assmann, 30.

²⁵Kersaudy, 24.

²⁶Assmann, 49.

²⁷Kessler, 7.

²⁸United States Air Force, AFDD 1, *Air Force Basic Doctrine* (Washington: Government Printing Office, September 1997), 27.

²⁹Ibid., 29.

³⁰Ibid.

³¹Ibid., 45.

³²United States Air Force, AFDD 2-1, *Air Warfare* (Washington: Government Printing Office, January 2000), 30.

³³Ibid., 8.

³⁴Ibid., 10.

³⁵Ibid., 14.

³⁶Ibid., 17.

³⁷ The British aircraft employed during this campaign were of varying type and quality. The primary carrier and land-based fighter was the Gloster Gladiator bi-plane, nimble, but slow in comparison to German bombers (253 mph versus 258 mph of the HE-111). One squadron of Hurricanes (339 mph) served around Narvik during the closing period of the campaign. On board the carriers, the Gladiator joined with the Fairey Swordfish bi-plane torpedo bomber (138 mph) and the Blackburn Skua fighter and dive bomber (a monoplane design with a maximum speed of only 225 mph) to form the carrier air groups. The aircraft used by the British Royal Air Force in the battle were a mix of two engine medium bombers: the Wellington, Blenheim, Hampden, and Whitley. Of these aircraft, only the Wellington survived the test of war; all had limited defensive armament and were operating at their extreme range over Norway. Kenneth Munson, *Aircraft of World War Two*, (Garden City: Doubleday and Company, 1962), 37, 47, 72, 80, 86-87, 152, 169.

³⁸Military Intelligence Service, 7.

³⁹German paratroopers jumped armed only with pistols and knives; rifles and machine guns were dropped in containers separately. John Galvin, *Air Assault: The Development of Airmobile Warfare* (New York: Hawthorn Books, 1969), 8.

⁴⁰Ibid., 9-10.

⁴¹James L. Moulton, *A Study of Warfare in Three Dimensions* (Athens: Ohio University Press, 1967), 97.

⁴²Jack Adams, *The Doomed Expedition* (London: Leo Cooper, 1989), 19.

⁴³Moulton, 97.

⁴⁴Derry, 36.

⁴⁵Moulton, 9.

⁴⁶Kessler, 8.

⁴⁷These infantry units were part of the 163rd Infantry Division. The unit was raised only four months before the invasion. Telford Taylor, *The March of Conquest* (New York: Simon and Schuster, 1958), 118.

⁴⁸The German planning provided for base protection by installing searchlights, anti-aircraft batteries, and listening devices. Fornebu was doubled in size within thirty days, and the space around Sola cleared so numerous pales could be parked in the surrounding woods. United States Navy, *Information Bulletin* (Washington: Office of the Chief of Naval Operations, Naval Intelligence, 1940), 62.

⁴⁹Kessler, 9.

⁵⁰Derry, 40.

⁵¹Ziemke, 48.

⁵²Assmann, 56.

⁵³Air Ministry of Great Britain, 63.

⁵⁴Bernard Ash, *Norway 1940* (London: Cassell, 1964), 176.

⁵⁵Ibid., 71.

⁵⁶Matthew Cooper, *The German Army* (Chelsea: Scarborough, 1991), 110.

⁵⁷Kersaudy, 102-104.

⁵⁸Ibid., 106.

⁵⁹Kessler, 10.

⁶⁰Ibid., 22.

⁶¹Adams, 98.

⁶²Ibid., 125.

⁶³Ibid., 172.

⁶⁴Ibid., 173.

⁶⁵Kessler, 12.

⁶⁶Ziemke, 76-80.

⁶⁷Kersaudy, 129.

⁶⁸Gennette, 198.

CHAPTER 4

SETTING THE CONDITIONS: ACHIEVE SURPRISE AND ISOLATE THE LODGMENT

Achieving surprise and isolating the selected lodgments ensures the enemy will not be able to threaten a forcible entry operation. Because the need to build combat power may put early entry forces at a disadvantage, surprise and isolation measures protect the force during the vulnerable period of insertion. The Germans planned to rely on surprise and isolation of the landing areas heavily in the invasion of Norway to redress weakness in combat power of the leading units.

The degree of surprise required in a forcible entry operation depends upon the nature of the operation.² Operations carried out in the face of a powerful anti-entry force require a premium of surprise to create conditions favorable to the forcible entry operation. Striking the enemy at a time or place in a manner for which he is unprepared and which he did not expect is the definition of surprise.³ In offensive operations unpredictability and boldness help gain surprise, thereby delaying enemy reactions, overloading and confusing his command and control systems, inducing psychological shock in enemy soldiers and leaders, and reducing the coherence of the defense.⁴ Surprise need not take the enemy totally unaware, only assure that he become aware too late too react effectively.⁵ The German action in Norway depended heavily on surprise, based on the inferiority of the German to the British naval fleet and the inability to insert a large

number of initial assault forces. From the initial planning, the success of the invasion of Norway counted upon surprise

In keeping with the importance of surprise to the operation, the Germans spared no efforts during the planning of *Weserubung* to ensure that condition. The emphasis on surprise was apparent from statements of Hitler and Raeder concerning the operation. In his Directive for the Operation, Hitler stated:

In view of our military and political strength in relation to the Nordic states, the forces to be used for operation “Weserubung” should be kept as small as possible. The small number must be compensated for by bold action and surprise⁶ . . . The most important thing is for our operations to take the Nordic countries as well as the western enemies by surprise. (underline in original) This should be kept in mind in making all preparations, especially in assembling the troops and the shipping space, training, and loading. If the preparations for embarking can no longer be kept secret, the commanders and troops should be given a false destination. The troops must not become aware of the real objective until they have put to sea.”⁷

The task of Group XXI, as stated in the same document was, “surprise occupation of the important coastal points from the sea and air.”⁸ Hitler reinforced the emphasis concerning surprise by assigning only a small staff to the planning of the operation (under Captain Krancke) to preserve secrecy.⁹ When interviewing General Falkenhorst, the ground force commander, Hitler underlined the fact that an absolute precondition to success was rigorous secrecy. General Falkenhorst, buying a travel guide of Norway in a Berlin bookstore to use for planning, also bought guides to several other countries so as not to arouse suspicions.¹⁰

Admiral Raeder, in his comments to Hitler and his naval subordinates, echoed the need for surprise. In a briefing to Hitler, he said, “On many occasions in the history of war those very operations have been successful which went against all the principals of

warfare, provided they were carried out by surprise.”¹¹ In instructions to his officers, Raeder reminded “The pre-requisites for the success of the operation are surprise and rapid action.”¹² From his and Hitler’s comments there can be no doubt of the importance of surprise in the invasion of Norway.

Methods of insertion restricted the number of troops in the initial assault on Norway. By the sea, only the troops and light equipment that could be carried on the limited number of naval surface combat units would be available for the initial forcible entry. For example, the force inserted into Trondheim included the headquarters and three battalions (each short one company) of the 138th Mountain Infantry Regiment, supported by one troop of mountain artillery, one mountain engineer company, and two companies of coastal artillery personnel.¹³ The cruiser *Hipper* and four destroyers transported 1,700 troops to Trondheim.¹⁴ These troops faced a mobilized battalion (about 750 soldiers) of the 5th Infantry Division (the division headquarters was located in Trondheim), and if allowed to fully mobilize, the entire division. These force ratios were similar to those at every landing point in the country. This clearly illustrated the importance of surprise in preventing or delaying the Norwegian mobilization.

Equally important to the generation of troops, Norwegian mobilization also had to equip those forces to fight. The German plan placed a premium on securing the Norwegian equipment centers to deny the force its equipment in case of mobilization. As most of the mobilization equipment centers were in the large population centers targeted in the surprise assault, the Norwegians that managed to mobilize found themselves without heavy weapons and reserve stocks of small arms ammunition.¹⁵ Five of the six divisional headquarters, along with their official mobilization lists, were in German hands by 10

April.¹⁶ The mobilization that was accomplished took place outside the city in a haphazard manner (except for the 6th Division, as it already had forces mobilized to guard the northern frontier of the country.) One Norwegian volunteer, who had been issued a rifle and military jacket to wear over his civilian clothes upon his mobilization, had this to say of his service: "We could do exactly what we wanted to do. We had no military discipline at that time. There were all types; people had come from all over Norway to join in the fight. We had found a dozen machine guns and we also found a lot of food so we had plenty of rations. We also got some trucks which we manned."¹⁷ The group conducted harassment ambushes until the Germans threatened to bomb all the local villages, whereupon the group dispersed. The United States Naval Attaché to Norway reported ". . . the Norwegian mobilization was completely demoralized. Many young men were standing around various places looking for officers to lead them to places where uniforms, arms, and ammunition could be obtained."¹⁸ When General Ruge, the former inspector of infantry, assumed army command, he estimated that only a third of the servicemen succeeded in reporting to a military unit of some kind, and most of those units were out of communication.¹⁹ Ammunition was short, and Ruge commented he had more men than rifles and only three batteries of artillery. He put unarmed soldiers to work building barricades.²⁰ The process of mobilization was not aided by the manner in which the government called the nation to arms. The initial call on 9 April was for only partial mobilization consisting of four ready brigades, the members informed by mail to report on 11 April. Several hours later, the foreign minister declared in an offhand radio comment that full mobilization had been ordered. To heighten the already confused

situation, that evening Quisling announced during a radio address that the mobilization had been cancelled.²¹

The equipment denied to the Norwegians in the captured equipment stores was made use of by the Germans. Near Oslo, at the mobilization center at Drammen, the Germans captured seven field pieces and a large quantity of rifles and ammunition.²² At Trondheim, they captured twenty-eight field pieces and a noticeable amount of small arms ammo.²³ The captured 125mm guns and 120m Howitzers outfitted an artillery troop,²⁴ while the shipwrecked destroyer crews at Narvik drew small arms from the captured depot at that location.²⁵

The measures taken to ensure secrecy in the planning phase of the operation made the gathering of intelligence to support the invasion more difficult. Operational and military-geographical studies did not exist, and according to one source, there was not even a usable map. With the use of several commercial maps and tourist guides, military maps were produced by the end of February 1940.²⁶ The collaboration with Quisling and his organization did not offer any intelligence coups to the Germans; at the time of the invasion, they were not even aware of the existence of some of the coastal forts.²⁷ The German air and naval attaches in Oslo provided the most useful information. These were the only human intelligence sources used; all others were considered security risks. A particularly bizarre incident occurred at Fornebu airfield in February, when a German plane landed and thirty passengers disembarked and began taking pictures of the installation.²⁸ In all, the overriding concern to maintain the secrecy of the operation greatly restricted active intelligence preparations for the invasion.

The need for secrecy influenced not only intelligence gathering but the execution of the plan as well. Operational security measures were strictly enforced. These measures included the embarkation of troops and actions of those troops on board ship. The troops assembled outside the ports in northern Germany, embarked at night, and proceeded immediately to sea. The troops did not show themselves on deck until landing, and the ships themselves avoided the enemy at all cost. The officers and men in the invasion forces were told their destinations once at sea.²⁹ Preparations that could not be concealed were passed off as part of the upcoming invasion of France; that operation was expected. In spite of the mania for secrecy, the British and Norwegians observed events that indicated an invasion was afoot, but all were ignored or misinterpreted.³⁰ In March there was evidence of concentrations of shipping and troops in northern Germany, followed on 5 April by word from Berlin to Oslo that landings on southern Norway were imminent. On 7 April, large German warships were sighted preceding northward along the Norwegian coast.³¹ The Norwegian government did alert the coastal forts, but did not call for mobilization, nor give the forts permission to mine the harbor entrances, nor protect the airfields from airborne assault.³² When mobilization was ordered the morning of the invasion, individuals were notified by post, delaying the process by two days. The Norwegians were fixated on the intentions of the western powers, as they assumed western action would cause a German reaction. It was never considered that Germany might preempt Allied actions.³³ On 8 April the British Admiralty forwarded the following telegram to the commander of the Home Fleet:

Recent reports suggest a German expedition is being prepared; Hitler is reported from Copenhagen to have ordered unostentatious movement of one division in ten ships by night to land at Narvik, with the simultaneous occupation

of Jutland. Sweden to be left alone. Moderates said to be opposing the plan. Date given for the arrival at Narvik was April 8th. All these reports are of doubtful value and may well be only a further move in the war of nerves.³⁴

On the same day as the telegram, a Polish submarine sank a German steamer bound for Bergen. The survivors wore German army uniforms and stated they were on their way to Bergen to help the Norwegians against the British.³⁵ Even in the face of such evidence, the British Admiralty assumed these ships represented an attempted break out into Atlantic waters -- not an invasion force bound for Norway. The British and Norwegians assumed that landings could not be made without control of the sea, an assumption reinforced by the short distance to Norwegian from the British Home Fleet base at Scapa Flow -- less than twenty-four hours steaming.³⁶ In fact, the British Chiefs of Staff considered the idea of any seaborne operation against the western sea-board of Norway could be "dismissed as impracticable" in light of the British control of the sea.³⁷ The Admiralty persisted in this belief even after events indicated otherwise. The result of this appreciation was powerful British naval forces lying off Norway to the northwest preventing a non-existent breakout attempt while German naval units were vulnerable to interception just outside the Norwegian ports.³⁸

Working in conjunction with the element of surprise is the ability to seal off (both physically and psychologically) the enemy from his sources of support and protect the lodgment areas from enemy capabilities that could affect it.³⁹ Several German operations in this invasion directly or indirectly contributed to this aim.

The attempt to isolate the lodgments from British sea power by use of the German *Luftwaffe* has been discussed in this paper. The Germans also attempted to interdict the Royal Navy closer to the British Isles by laying aerial mines near the main fleet

anchorages. Raeder called for offensive minelaying in the area of Scapa Flow and the River Clyde during meetings with the Fuehrer on 22 and 26 April.⁴⁰ Another attempt to isolate the lodgment around Trondheim latter in the campaign was through a parachute drop on the key rail and road center of Dombras, just to the south. Upon receiving reports of a British landing at Aandenes, the Germans took action to prevent the juncture of the Norwegian forces retreating from the Oslo area with that landing force, as the combined force would then threaten Trondheim from the south.⁴¹ A small parachute force of 150 troopers jumped on 15 April to secure the railroad junction. Badly scattered by heavy small arms fire and forced to jump at an alternate drop zone, the company could only muster sixty-three soldiers for the attack. After severe fighting, the remaining thirty-four men of this group surrendered on 19 April to the Norwegians and advanced elements of the British landing force.⁴² With the failure of this mission, the Germans had to rely on pressure caused by the columns from Oslo to prevent British and Norwegian attacks on Trondheim from the south.

Surprise was the most important element in the invasion of Norway, a fact Hitler recognized at the inception of the plan, specifically mentioning in writing the importance of gaining surprise. Accordingly, all actions taken in the operation emphasized the role of surprise. The conveyance of the small landing forces safely under threat of the superior Royal Navy and the rapid seizures of the mobilization depots that rendered Norwegian resistance to the invasion ineffective owed much to the value of surprise. The Germans also attempted to isolate the lodgments through various applications of air power neutralize the abilities of the Norwegians and Allies to strike at the vulnerable lodgments early in the invasion. By making maximum use of surprise and isolation, the

invaders were able to execute the operation in the face of poor force ratios and created conditions favorable to the forcible entry.

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²United States Department of Defense, JP 3-18 (Preliminary Coordination) *Joint Doctrine for Forcible Entry Operations*, (Washington: Chairman of the Joint Chiefs of Staff, 2000), III-1.

³United States Army, JFM 101-5-1, *Operational Terms and Graphics* (Washington: Government Printing Office, September 1997), 1-148.

⁴United States Army, ST 3-0, *Operations* (Fort Leavenworth: Government Printing Office, June 1993), 7-4.

⁵Ibid., 4-14.

⁶United States Navy, *Fuehrer Directives and Other Top-Level Directives of the German Armed Forces 1939-1941* (Washington: Office of Naval Intelligence, 1948), 88.

⁷Ibid., 89.

⁸Ibid.

⁹In January 1940, a *Luftwaffe* major made a forced landing in Belgium carrying the plans for the invasion in the west. Hitler demanded more stringent security procedures following this incident. Earl Ziemke, *The German Northern Theater of Operations* (Washington: Department of the Army, 1959), 14.

¹⁰Louis De Jong, *The German Fifth Column in the Second World War* (Chicago: University of Chicago Press, 1956), 172.

¹¹Naval Institute Press, *Fuehrer Conferences on Naval Affairs 1939-1945* (Trowbridge: Redwood Burn Limited, 1990), 86.

¹²Ibid., 90.

¹³Historical Branch, Cabinet Office, *Notes on the Norwegian Campaign* (London: Her Majesty's Stationery Office, 1951), 23.

¹⁴Ibid., 36.

¹⁵For example, the Norwegian 6th Division in northern Norway in the vicinity of Narvik lost one of its two equipment centers to the initial German invasion. James L. Moulton, *A Study of Warfare in Three Dimensions* (Athens: Ohio University Press, 1967), 128.

¹⁶Jack Adams, *The Doomed Expedition* (London: Leo Cooper, 1989), 31.

¹⁷Ibid., 32.

¹⁸United States Navy, *Information Bulletin* (Washington: Office of the Chief of Naval Operations, Naval Intelligence, 1940), 73.

¹⁹Ibid., 31.

²⁰Ibid., 81.

²¹Francois Kersaudy, *Norway 1940* (London: Collins, 1990), 68, 70, 78.

²²United States Navy. *Information Bulletin*, 73.

²³Paul Paul, *Die 3. Gebirgs-Division 1939-1945* (Bad Nauheim: Verlag Hans-Henning Podzun, 1958), 32.

²⁴Historical Branch, Cabinet Office, 35.

²⁵Ibid., 44.

²⁶De Jong, 173.

²⁷Ibid.

²⁸When asked to produce his papers authorizing his landing, the pilot of the plane produced a permit to inspect the Altmark, lying in a fjord forty miles distant. The identity of these persons is unknown. James Bassett, “An Example of Extended Strategy: The Invasion of Norway” (Washington: Georgetown University, 1948), 29.

²⁹Robert Gennette, “*Weserubung*: The Effects of the Norwegian Campaign Upon the German Navy” (San Diego, San Diego State College, 1972), 73.

³⁰British Intelligence in Sweden knew of the build-up warships and troop transports at Stettin and other Baltic ports, but no countermeasures or precautions were taken as a result of the intelligence. Lauran Paine, *German Military Intelligence in World War II* (New York: Stein and Day, 1984), 52.

³¹These were the warship groups heading for Trondheim and Narvik. William Shirer, *The Rise and Fall of the Third Reich* (New York: Simon and Schuster, 1960), 695.

³²Gennette, 134.

³³Olav Riste, *Weserubung: Der Perfekte Strategiske Overfall?* (Oslo: Institutt for Forsvarsstudier, 1990), 27.

³⁴Thomas K. Derry, *The Campaign in Norway* (London: Her Majesty's Stationery Office, 1952), 28.

³⁵Ziemke, 43.

³⁶Ulrich Kessler, Military Study B-485, *The Role of the Luftwaffe in the Campaign in Norway* Military Study B-485 (Historical Division, US Army European Command, August 1946), 3.

³⁷James Butler, *Grand Strategy*, Vol. II (London: Her Majesty's Stationery Office, 1957), 93.

³⁸The Norwegians also received warnings on 8 April. At 1400 the Danish naval staff reported large numbers of light craft and *Gneisenau*, *Leipzig*, and *Emden* steaming north, along with transports leaving Germany. Paul Leverkuehn, *German Military Intelligence* (New York: Praeger, 1954), 63.

³⁹United States Army, JFM 101-5-1, 1-86.

⁴⁰Naval Institute Press, 97, 100.

⁴¹Historical Branch, Cabinet Office, 32.

⁴²John Galvin, *Air Assault: The Development of Airmobile Warfare* (New York: Hawthorn Books, 1969), 10-11.

CHAPTER 5

SETTING THE CONDITIONS: INTEGRATE PSYCHOLOGICAL OPERATIONS/ CIVIL AFFAIRS AND MANAGE IMPACT ON ENVIRONMENT

Closely coupled with surprise in the invasion of Norway was the understanding of the psychology of the Norwegian and British military forces and the Norwegian people themselves. Hitler viewed the effort as having the character of “a peaceful operation designed to give armed protection to the neutrality of the Nordic states,”¹ and psychological efforts aimed at reinforcing that ideal to splinter opposition to the forcible entry. This effort was supported by a civil affairs program that attempted to control the Norwegian population from the very moment the invasion began. The military plan that the psychological and civil affairs efforts supported was well organized to deal with the special environment Norway presented to a forcible entry operation.

Psychological operations (PSYOPS) are defined as “planned operations to convey selected information and indicators to foreign audiences to influence their emotions, motives, objective reasoning, and ultimately the behavior of foreign governments, organizations, groups, and individuals. The purpose of psychological operations is to induce or reinforce foreign attitudes and behavior favorable to the originator’s objectives.”² Before and during the invasion, the Germans executed PSYOPS at the diplomatic and group level. Their normal air operations also had a significant individual effect on the leaders of the Royal Navy. Civil affairs are “the activities of a commander that establish, maintain, influence, or exploit relations between military forces and civil authorities, both governmental and nongovernmental, and the civilian populace in a

friendly, neutral, or hostile area of operations in order to facilitate operations and consolidate operational objectives.”³ Through collaboration with Quisling, the Germans hoped to facilitate their peaceful occupation of Norway, and through specific directives concerning the deportment of the occupying troops, they hoped to dampen the spirit of opposition.

One contributing cause to the strategic surprise gained by the Germans was a number of false invasion alarms in Norway during the winter of 1939-1940. In at least two instances, the Norwegians received reports that an invasion was imminent.⁴ Leaves were cancelled and forts manned in at least one of the cases, but no invasion materialized. Whether this was intentional on the part of Germany, or mere chance, it served to reinforce the attitude that invasion was not a possibility.⁵

The Germans also took direct steps to intimidate the Norwegian defenders. On 5 April, the Foreign Minister in Oslo, Dr. Brauer, held a reception at his legation for various persons in the Norwegian government. During the evening Brauer showed a new film depicting the German conquest of Poland, culminating in the bombing of Warsaw.⁶ On the next day, Brauer invited the Norwegian Foreign Minister and other diplomats to dinner on 19 April in perfect innocence, as Brauer was not privy to the date of invasion until 7 April.⁷

The Germans also planned air demonstrations to intimidate the population of the cities of southern Norway on the day of the invasion. Hitler directed the air force to “provide air units primarily for demonstration and for dropping leaflets.”⁸ In the same directive, Hitler mentioned that in dealing with the Norwegian government for terms favorable to the Germans “. . . demonstrations by naval and air forces will lend the required

emphasis.”⁹ In the event, the obvious German domination of the skies over Norway “paralyzed the Allies’ countermoves”¹⁰ The effect these planes had on the Norwegian and Allied troops has already been discussed. The acting chief of staff of *Fleiger Korps X* felt that the “hundreds of planes roaring over southern Norway helped much to facilitate the occupation of the first objectives.”¹¹

The population of southern Norway was not the only group affected by the German air power; the Royal Navy also felt its psychological effect. The *Luftwaffe* was not superior to the Royal Navy in a strictly technological sense, as we have already seen, considering the deficiencies in equipment and training of the service at this time in the war. On 9 April, when the Home Fleet approached the Norwegian coast near Bergen, they came under concentrated attack from the *Luftwaffe*. In the attack, the German planes sank one destroyer, but no capital ships sustained serious damage. The flagship, the battleship *Rodney*, was hit by a 1,000 pound bomb, and some of the ships shot off forty percent of their anti-aircraft ammunition.¹² That evening, the commander of the Home Fleet, Admiral Forbes, in a telegram to the Admiralty, stated his intention to leave the whole southern area “mostly to submarines, owing to German air superiority.”¹³ The survival of the British cruiser *Suffolk* after seven hours of bombardment on 17 April did nothing to reverse the opinion of the Home Fleet commander.¹⁴ This action later contributed to the cancellation of a direct naval assault on Trondheim, as Admiral Forbes did not think an “opposed landing . . . under continuous air attack” was possible.¹⁵ The first benefit expected of the German dealings with Quisling before the invasion was to gain intelligence concerning the defenses. The invaders also planned to use Quisling to form a pro-German government following the invasion. Early in the morning on the

day of the invasion, Foreign Minister Brauer delivered an ultimatum to the Norwegian government. It stated the Germans had irrefutable evidence that the Allies intended to invade Norway, and, since Norway would be unable to resist successfully, German troops were coming to the aid of the country. German instructions for their troops for the invasion began with the statement, “All soldiers must realize that they have not entered an enemy country but the troops have come to protect the country and its inhabitants.”¹⁶ The ultimatum demanded the surrender of all military forces and guaranteed territorial integrity. The Norwegians refused the offer.

On the day of the invasion Quisling, apparently operating with the permission of Alfred Rosenberg, a highly placed Nazi party official, announced to Norway over the powerful Oslo radio station that he was the new head of government.¹⁷ The confusion resulting in the Norwegian mobilization has been noted, and an equal amount of confusion gripped the German Foreign Minister, who had no previous knowledge of the event. Brauer immediately warned Berlin that no Norwegian would collaborate with Quisling and the act was likely to increase the will to resist.¹⁸ Brauer was correct in this assessment, and the removal of Quisling from power was a necessary condition for the Norwegian government to negotiate peace terms. The poor coordination of this affair stood in marked contrast to the otherwise effective psychological campaign.

The physical environment of the area also presented the Germans with significant difficulties in the invasion, including severe weather, rough terrain, and the great distance from bases in Germany to the theater of operation through hostile or neutral space. The answer to the first problem was the assignment of specially trained forces and to the

second unique organization and fighting techniques. The logistics difficulties forced the adoption of a complex and risky plan of sea reinforcement and supply.

The distance from German embarkation ports and the harsh weather of central and northern Norway caused the Germans to assign the objectives of Trondheim and Narvik to the 3rd Mountain Division transported on warships. These troops, specially trained and equipped to survive and fight in difficult conditions in small groups of five, counted among their equipment supplies of sunglasses and lanoline ointment as protection from the elements.¹⁹ Realizing that offensive action in the restricted valleys would require combined arms to be successful following the transition to sustained operations from the forcible entry, the Germans formed a provisional battalion of tanks from armor training centers.²⁰ The techniques used to clear the restricted valleys of defenders was to employ a column consisting of an advanced guard riding on motorcycles, followed by a main body in trucks lead by two or three tanks. Ski detachments were formed to allow these forces to flank any defenses centered on the road.²¹ The *Luftwaffe* understood the values of the limited number of roads and adjusted their close-support techniques accordingly.

The United States Naval Attaché reported that the Germans “did not bomb the paved road, although at least six bomb holes were counted near the road. They only machine-gunned the road. This is another example how the Germans saved what they expected to use and did use later.”²²

The sea supply plan rested on surprise, as the German Navy could not protect the transport ships in a conventional manner. Three problems faced the logistics planners in this forcible entry operation. The first was the need to supply weapons and equipment to the initial assault troops transported in warships. The Germans solved this problem by

detailing seven camouflaged steamers to sail independently to land at Narvik (three ships), Trondheim (three ships), and Stavenger (one ship) and arrive in the ports shortly before the warships.²³ The second problem was the transport of troops and equipment designated as vital reinforcements to the initial wave. These reinforcements (fifteen ships of the 1st Sea Transport Division) were not sent to the vulnerable western ports, only southern Norwegian destinations. Two other transport divisions were allocated for the movement of follow-on troops and supplies starting two days after occupation. The last difficulty was the requirement for fuel both for naval units and forward operations of the army and air force. Two tankers were dispatched to Narvik and one to Trondheim, again proceeding independently. The transport division and tankers were to arrive the day of the invasion concurrently with the warships.

In the event, the planning to overcome the peculiarities of the theater of operation obtained mixed results. Of the original group of seven steamers bound for the western ports, six were sunk or captured in transit. This caused the lodgments at Narvik and Trondheim supply difficulties, as had already been mentioned. Equally disastrous to the German supply situation was the sinking of two of the three tankers, contributing to the sinking of all the invading destroyers in Narvik and the hampering of air operations at Trondheim. Only the sea transport elements were successful somewhat, but only after redoubled efforts against Allied submarines off the southern Norwegian coast. The failure of the sea supply to the lodgments on the western shores of Norway necessitated alternate means of supply for these areas. The massive (by 1940 standards) airlift effort has already been mentioned. The Germans also took advantage of the neutral status of Sweden to ship supplies and troops by rail to Narvik and Trondheim. By

the laws of neutrality, only certain categories of troops or supplies could be delivered by these means, but German diplomatic pressure backed by threats widened the categories of permissible cargo. Eventually riflemen were being delivered by train into Narvik to reinforce the garrison.²⁴

The Germans exhibited an appreciation of psychological warfare and the difficulties caused by the environment of the northern theater in planning for and organizing their invading forces. Their PSYOPS campaign supported the campaign, especially in its magnification of the element of surprise and in the effects upon the superior British naval power. Serious failures in the civil affairs arena (the Quisling affair) and the logistics execution were overcome, in the case of the former by military skill and in the latter by flexible application of air and diplomatic power to supply the isolated German forces.

²⁵

¹United States Navy, *Fuehrer Directives and Other Top-Level Directives of the German Armed Forces 1939-1941* (Washington: Office of Naval Intelligence, 1948), 88.

²United States Army, JFM 101-5-1, *Operational Terms and Graphics* (Washington: Government Printing Office, September 1997), 1-125.

³Ibid., 1-26.

⁴The dates of the alerts were around Christmas, 1939, and February of 1940. The reports were from “reliable sources.” James Bassett, “An Example of Extended Strategy: The Invasion of Norway” (Washington: Georgetown University, 1948), 20.

⁵Ibid.

⁶One of the attendees was the United States Naval Attaché, who noted “it was a striking lesson to them (the Norwegians) of what should happen if Germany should occupy Norway. United States Navy, *Information Bulletin* (Washington: Office of the Chief of Naval Operations, Naval Intelligence, 1940), 13.

⁷Louis De Jong, *The German Fifth Column in the Second World War* (Chicago: University of Chicago Press, 1956), 176.

⁸United States Navy, 89.

⁹Ibid.

¹⁰Basil H. Liddell Hart, *History of the Second World War* (New York: G.P. Putnam's Sons, 1970), 59.

¹¹Ulrich Kessler, Military Study B-485, *The Role of the Luftwaffe in the Campaign in Norway* (Military Study B-485. Historical Division, US Army European Command, August 1946), 8.

¹²Thomas K. Derry, *The Campaign in Norway* (London: Her Majesty's Stationery Office, 1952), 34.

¹³D. Riste, "Sea Power, Air Power, and Weserubung" (Paper for the International Conference on Military History Papers, Washington, D.C., 1975), 6.

¹⁴James L. Moulton, *A Study of Warfare in Three Dimensions* (Athens: Ohio University Press, 1967), 204.

¹⁵Riste, 7.

¹⁶Historical Branch, Cabinet Office, *Notes on the Norwegian Campaign* (London: Her Majesty's Stationery Office, 1951), 29.

¹⁷Bassett, 26.

¹⁸De Jong, 177.

¹⁹United States Navy, 121.

²⁰This unit, designated *Panzer Abteilung 40*, consisted of 40-50 MKI (light tanks armed with machineguns) and MKII (light tanks armed with low-caliber cannon) vehicles. Moulton, 62.

²¹Military Intelligence Service, *The German Campaign in Norway* (Washington: War Department, 1942), 23.

²²Historical Branch, Cabinet Office, 73.

²³Kurt Assmann, *The German Campaign in Norway; Origin of the Plan, Execution of the Operation, and Measures Against Allied Counter-attack* (London: Tactical and Staff Duties Division [Foreign Documents Section], Naval Staff, Admiralty, 1948), 12.

²⁴A list of the item delivered by train to Narvik includes medical supplies and stores, “specialists” in civilian clothes (machine-gunners and mortar crewman), signal personnel, and clothing. The total number of personnel delivered by train through Sweden was about 250. Historical Branch, Cabinet Office, 60-61.

²⁵

CHAPTER 6

SETTING THE CONDITIONS: NEUTRALIZE ENEMY FORCES

Even if a military that conducts a forcible entry gains control of the sea and air, isolates and surprises the enemy in the lodgment area, and conducts an effective psychological campaign, it must still neutralize the enemy forces in the lodgment area. This neutralization can be accomplished by long-range fires, by the initial assault troops, or by a combination of both. The definition of neutralize is “to render enemy personnel or material incapable of interfering with a particular operation.”¹ The preceding chapters in this thesis have examined the other condition settings for a forcible entry. Those other operations facilitate neutralization of the enemy forces in the lodgment area. This chapter examines the neutralization of the anti-access forces in the Narvik and Trondheim areas, as both these lodgments were vulnerable to Norwegian action. In the initial attack, both these areas were beyond effective range of the German air forces, preventing that arm from assisting the assault troops.

The port of Narvik was not only remote from German bases, but also isolated from central and southern Norway by rugged mountains. At the time of the battle, no road linked the port of Narvik to central and southern portions of the country. Around the port itself, a force with an amphibious capability could make use of the many deep-water fjords to outflank defending lines. A road led north from the port (after a ferry crossing from the city proper) to the northern-most portions of the country. The entire area was the responsibility of the Norwegian 6th Infantry Division. A single rail line led east to

neutral Sweden, about fifteen miles distant, and passed through the border town of Bjornfjell. An invader in this area, unable to supply by sea would be totally isolated from friendly units to the south (fig. 4).

The Norwegian forces around the port of Narvik potentially were the most difficult for the Germans to neutralize in the whole of the invasion. The Norwegian 6th Division, the division responsible for the defense of the port, had an entire brigade mobilized due to tensions on the Norwegian-Finnish border following the Finnish war with the Soviet Union. On 8 April, the division commander, Major-General Fleischer, gave orders for the I Battalion, 13th Infantry to move from the depot at Elvegardsmoen to Narvik to reinforce the defenses in the port.² The unit accomplished the move slowly due to the necessary ferry ride and a snowstorm. The troops occupied billets upon their early morning arrival in Narvik. These reinforcements were to occupy their defensive positions at first light.³ Colonel Sundlo, the military commander of the town, had 432 men to establish the defenses (not counting the I/13th reinforcement⁴), armed with machine guns and four Bofors light anti-aircraft guns. These troops were in defensive positions when the Germans entered the harbor.⁵ Norwegian naval forces were also present at Narvik. In addition to the two coastal defense ships mentioned earlier, three fishery protection vessels and two submarines were in the harbor,⁶ along with twenty-three other merchantmen of various flags.⁷ General Fleischer ordered the mobilization of the remainder of the 6th Division soon after first light on 9 April. In all, the Norwegians were able to concentrate five infantry battalions and four artillery batteries⁸ in the Narvik area, along with their support troops, within two weeks of the landings.⁹

To neutralize the Norwegian forces in Narvik the Germans planned to use 2,000 soldiers of the 139th Regiment of the 3rd Mountain (*Gebirgs*) Division, accompanied by the division commander, General Dietl.¹⁰ Ten destroyers transported this force to Narvik, with mountain infantry guns and heavy mortars carried on deck. The force was task-organized, as insufficient transport was available for the entire regiment. The nine rifle companies, reinforced by machine gun and mortar teams from the battalion machine gun companies, comprised the bulk of the landing force, accompanied by the Regimental Headquarters, the Regimental Headquarters Company, and elements of the Division Headquarters (table 1).¹¹

Table 1. Table of Authorization for a German Mountain Infantry Regiment

	<i>Pers</i>	<i>LMG</i>	<i>HMG</i>	<i>81 MTR</i>	<i>120 MTR</i>	<i>ATR</i>	<i>AT GUNS</i>	<i>75 INF Guns</i>	<i>120 INF Guns</i>
RGT HQ	25								
RGT HHC									2
IN BN	182	4							
IN BN	877	40	12	6	4			2	
IN BN	877	40	12	6	4			2	
IN BN	877	40	12	6	4			2	
AT CO	190	6					36		
LT	36								
MTN									
Total	3064	130	36	18	12	36	3	6	2

RGT HQ= Regimental Headquarters

LMG= Light Machine Gun

RGT HHC= Headquarters Company

HMG= Heavy Machine Gun

IN BN= Infantry Battalion

MTR= Mortar

AT CO= Anti-tank Company

ATR= Anti-Tank Rifle

LT MTN= Special Climbing Platoon

AT= Anti-Tank

INF GUN= Infantry Howitzer

Source: W. Victor Madej, ed., *German Army Order of Battle 1939-1945*, (Allentown: Game Marketing Company, 1981), 42.

Early in the morning of 9 April, nine German destroyers entered the Ofotfjord, the water passage leading to Narvik (the tenth destroyer, the *Erich Giese*, had fallen about three hours behind the others due to the heavy weather).¹² A Norwegian patrol vessel reported the entry of the warships into the fjord. One German destroyer patrolled the fjord entrance, while two others landed troops to seize the coastal defense batteries.¹³ Three others landed their troops at Elvegaard to seize the mobilization depot, while the remaining three proceeded into Narvik. The Norwegian coastal defense vessel *Eidsvold* signaled the ships entering the Narvik harbor to halt by firing past the stern of the lead destroyer. Meanwhile a German party set out to the *Eidsvold* to negotiate a surrender of the Norwegian forces. The Norwegians refused, and as the negotiating party returned to their ship, the lead German destroyer torpedoed the *Eidsvold*, causing heavy loss of life. The second coastal defense ship, the *Norge*, fired on the remaining destroyers as they landed troops, but scored no hits on the German warships. Two torpedoes sank the *Norge* after she had fired seventeen rounds.¹⁴ The attack killed more than 250 Norwegians on the two ships.¹⁵ The two Norwegian submarines in the harbor were unable to offer any resistance. The destroyers also sank two armed British merchant ships that had engaged the German invaders.¹⁶

Even as the naval resistance to the landings continued, the mountain troops disembarked into Narvik by small motorboat or over the side of the transporting destroyers onto the pier. The speed of the assault was overwhelming. The Norwegian defense of the town

was confused by an order from Oslo, received at 0430, stating “Norwegian forces will not open fire on British or French warships in Narvik.” The poor visibility of the early morning along with fog made identification of nationality of the invaders doubtful.¹⁷ Nevertheless, Sundlo gathered his company commanders and prepared for battle. One eyewitness reported “a platoon of Norwegian soldiers in a truck came abreast of the German soldiers. They exchanged salutes and then the Germans politely dispersed the Norwegians, but made no effort to take them prisoner.”¹⁸ A patrol of Norwegian cavalry was made prisoner by the invading troops on the pier without firing a shot.¹⁹ After landing, General Dietl saw a Norwegian officer on the pier, and called out, “I greet the Royal Norwegian Army. The German Army has come to protect Norway and her neutrality.”²⁰ During the short truce in which General Dietl conferred with Colonel Sundlo, the Germans landed more troops and occupied key terrain in the town, fatally compromising the defense. At 0615, Sundlo surrendered the garrison under threat of naval bombardment. When he reported the surrender to General Fleischer, the general told him to consider himself under arrest.²¹ Major Spjeldnaes, commander of the I/13th Infantry, refused to surrender. Gathering 250 fully armed soldiers, he marched out of town to the east following the rail line to Sweden. When a German officer attempted to stop him, he replied “We are marching.”²² Upon the departure of this unit, the German force controlled Narvik, but possessed few heavy weapons. The heavy weather during the passage washed several of the infantry howitzers and heavy mortars off the decks of the destroyers.²³

Concurrent with the action at Narvik, the Germans captured the depot at Elvegaard without a fight. A Norwegian unit, ordered to the depot to defend the locality after the

I/13th Infantry moved to Narvik, did not arrive on time due to the snowstorm. The 138th Regiment captured enough small arms and ammunition to equip four battalions.

General Dietl attempted to expand the lodgment area in the days after the assault, with mixed results. The 6th Norwegian Infantry Division checked a thrust to the north along the highway to Barfudoss. Thereafter the Germans concentrated their effort in the north to holding a defensive line from Elvegaard to the Swedish frontier, a distance of over ten miles, with two understrength infantry battalions. The third battalion prepared for the defense of Narvik from a British seaborne attack. In the east, a single company from the battalion in Narvik, supported by a makeshift “armored” train and a ski platoon, attacked along the rail line to Sweden to clear the remnants of the I/13th from the track. Using the ski platoon to screen its southern flank, the company managed to capture forty-five Norwegians and force the other 150 into interment in Sweden during a brutal three-day engagement.²⁴ This action opened the rail line to Sweden; the line which in the coming weeks would provide limited numbers of specialist troops and supplies from Germany through neutral Sweden to the isolated German garrison.²⁵

Following the sinking of the ten German destroyers in the Ofotfjord by two British naval counterattacks, General Dietl managed to salvage all worthwhile equipment from the wrecks to augment his defenses.²⁶ He armed the shipwrecked sailors from the destroyers (some 2,500 in all) with captured Norwegian weapons stocks and put them to use as lines-of-communication troops. The infantry regiment transported every available machine or anti-aircraft gun on the ships to the shore, along with naval guns they could move.²⁷

The Germans managed to neutralize the Norwegian forces at Narvik by a combination of surprise, aggressive action, and improvisation. Although later in the campaign the Germans would lose control of Narvik, the operation would force the British and Norwegians to employ 30,000 troops, two squadrons of fighter planes, and two aircraft carriers with a great part of the home fleet.²⁸ The dire situation in France forced the Allies to evacuate newly captured Narvik in May and leave it open to German reoccupation.

The Norwegian forces in and around Narvik had planned to mount a defense based on repelling an invader during the landing, at the edge of the waters. Eventually a massive counterattack threw the invaders out of Narvik. Farther south, at Trondheim, the German forcible entry forces would face a defender employing a fallback defense to counter the invasion.

Trondheim is a crucial transportation hub in the central portion of Norway, as it is deeply indented from the sea and the Swedish border approaches to within 30 miles of the deep-water fjords of the coast. The town controls all north-south traffic in Norway. As at Narvik, around the port itself, a force with an amphibious capability could make use of the many deep-water fjords to flank defending lines. A single rail line led east to neutral Sweden, with a northward leading branch about twelve miles east of Trondheim. The ancient fortress of Hegra controlled the rail line to Sweden.²⁹ Twenty miles east of Trondheim, at Vaernes, a training base and airfield allowed for operation of land planes. Control of Vaernes was important for air communication to Narvik, and would allow the basing of bomber and fighter aircraft and the landing of reinforcements. Control of this

area by an invader would cut off all forces in the south from external assistance through the port, leaving them with no base of operation to conduct sustained operations (fig. 5). The Norwegian forces in and around Trondheim charged with its defense consisted of a mix of naval and army units. Most significant of the naval forces were the coastal defense batteries of Brettingnes and Hynes³⁰ (collectively called the Agdenes fortifications) located on the eastern side of Trondheimfjord leading to port. A fort on the western side of the fjord directed across from these two installations, Hambarenes, was unoccupied, its garrison due to take station on 9 April.³¹ Located in the harbor was a force of four ancient torpedo boats and three destroyers (one of them the brand new coastal destroyer *Sleipner*).³² The Norwegian 5th Division, headquartered in Trondheim and commanded by Major General Laurantzon, was responsible for the land defense of the port.³³ The forces immediately available consisted of the II/13th Infantry (recently mobilized to take the place of I/13th in northern Norway on “neutrality watch” and located at Steinkjer), and administrative units in Trondheim. Part of the 3rd Dragoon Regiment was also mobilized at Verdalsora, northeast of Trondheim.³⁴ All told, about 200 Norwegian army personnel occupied Trondheim the morning of the assault.³⁵ To neutralize the Norwegian forces in Narvik the Germans planned to use 2,000 soldiers of the 138th Regiment of the 3rd Mountain (*Gebirgs*) Division, under the command of Colonel Weiss. Four destroyers and the cruiser *Hipper* transported this force to Trondheim. The force was task-organized, as sufficient transport was not available to move the entire regiment. The rifle companies, reinforced by machine gun and mortar teams from the battalion machine gun companies, comprised the bulk of the landing force.³⁶ Also present was the regimental headquarters, a 100-man Naval coast artillery

battalion (less guns), an engineer company, and a troop of mountain artillery (four 75mm pieces). There were 1,700 troops in the initial assault.

In the early morning of 9 April, the *Hipper* led the four destroyers into Trondheimfjord at twenty-five knots. The speed of the assault and a lucky shot from the *Hipper* that severed the cable powering the searchlights in the batteries helped carry the ships past the coastal forts without damage.³⁷ Three of the destroyers stopped to land troops to capture the coastal batteries from the rear, while *Hipper* and the fourth destroyer proceeded to land their troops at Trondheim. There was no resistance in the city, and as two companies seized the 5th Division mobilization center, Colonel Weiss proceeded to the office of the military commander and accepted the surrender of Trondheim.³⁸ At the coastal forts, however, the Germans were encountering stiff resistance. The bypassed forts continued to fire at the destroyers, causing one to beach after being hit, and *Hipper* had to go to the aid of the group by landing additional troops and providing gunfire to silence the forts. On land, a group of thirty-five Norwegian artillerymen, armed with nine machine guns and fighting as infantry, managed to pin the initial German assault troops in front of the batteries. Casualties to the defenders totaled one killed and two wounded, while the Germans suffered twenty-two wounded.³⁹ Naval fire silenced the batteries by 1700, but the invaders did not secure all the forts until 11 April.⁴⁰ The mountain regiment eventually accepted the surrender of thirty officers, 320 men, eighteen coastal artillery pieces, thirty machine guns, and a large supply of ammunition from the forts.⁴¹ The naval forces in the harbor, despite an hour's warning of ships entering Trondheimfjord, offered no resistance. Three destroyers and a torpedo boat managed to escape to the open sea, the *Sleipner* sinking the German supply steamer *Main* during

transit to Britain.⁴² General Laurantzon abandoned the city upon hearing of German warships forcing their way past the coastal batteries and ordered his troops in Trondheim to make their way to Steinkjer. There they would cover the mobilization of as much of the 5th Division as could be assembled.

On the morning of 10 April the German troops, supported by warships in the fjord, advanced and captured Vaernes airfield, and continued east to seize the rail line to Sweden as a possible route for supply. Major Holtermann, the executive officer of the Norwegian 3rd Artillery Regiment, retired from Vaernes with the airfield garrison of fifty soldiers, and managed to collect a force of 300 men at the Hegra fortress.⁴³ The artillery of the fort could not effect Vaernes (eight miles distant), but it did draw German troops to it in an attempt to neutralize the garrison and prevent interference with the airfield operations as well as the railroad to Sweden. The Norwegians repulsed numerous attempts to capture the fort and inflicted serious casualties on the invaders.⁴⁴ The fort did not surrender until 5 May.

The days of 9-11 April held the most promise for the Norwegians in defeating the German landing at Trondheim. The *Hipper* and two destroyers had left the port to return to Germany by 11 April. All the coastal artillery positions fell by 11 April, but were not operational. Two of the three German supply steamers earmarked for Trondheim had been sunk and the third arrived late on 12 April. Vaenes airfield received seven Stukas on the same day, but a shortage of fuel and bombs limited the effectiveness of those aircraft along with the two flights of floatplanes operating in Trondheim harbor.⁴⁵ The three under strength infantry battalions attempted to protect the entire area between the

fort at Hegra and the batteries at the fjord, a distance of some thirty miles. A Norwegian historian noted:

Of the force at his disposal, Colonel Weiss had to detail most of the coast artillerymen to man the batteries of Agdenes fortress and an infantry unit to defend the land area of the fortress. In addition to that, his troops not only had to hold Trondheim (a town of 60,000 inhabitants) but must also be prepared to meet the advance of Norwegian forces. Neither the British nor the Norwegians used this good opportunity; and after a few days had passed, the danger to the Germans was over.⁴⁶

General Ruge held back two battalions from the fighting in the south to attack Trondheim from that direction, while the 5th Division had mobilized an under strength brigade for operations in the north. General Lauranzon postponed a counterattack⁴⁷ until British forces had been landed to assist him; by that time the German position had been greatly reinforced by air lift operations and the Germans commenced their own attack on the 5th Division. That attack, conducted in a blinding snowstorm, utilizing a destroyer left behind at Trondheim to conduct movement up the fjords to flank allied defenses, would drive the Allies out of central Norway and force the surrender of the 5th Division by 5 May.

Both forcible entry operations outlined above succeeded in neutralizing the defending Norwegian forces and preventing a counterattack on the lodgments (at least initially) by surprise combined arms actions executed with an aggressiveness that belied the numbers of German troops involved. The most effective task organization based on transport was used in the landing forces, and the high level of training and rapid capture of the Norwegian were measures of that aggressiveness. In the case of Narvik and Trondheim, resolute bands of Norwegians were able to deliver minor checks to the German operations by acting forcefully. However, the defenses as a whole were never able to

duplicate those small-unit actions due to an inability to recover from the initial surprise and weight of the well-executed combined assault. In comments concerning the cooperation of the German services in neutralizing resistance, the United States Naval Attaché said:

“[I] was particularly impressed with the apparent thorough knowledge of the three branches, Army, Navy, Air Force, seemed to have of each other. He really acted as if all three branches had followed the same system for a great part of their training. It is unquestionably true that the close operation of these three branches in the Norwegian operations can only be explained by some system of training that was general to all of them. Their strength lay in their training, for this developed the fine cooperation which existed.”⁴⁸

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¹United States Army, JFM 101-5-1, *Operational Terms and Graphics*. (Washington: Government Printing Office, September 1997), 1-109.

²This action was most likely prompted by the sinking of the German steamer *Rio de Janeiro* early in the afternoon of 8 April. Realizing the ship was full of uniformed Germans, the Norwegian government did alert all the coastal fortifications. They did not institute any other defensive measures on 8 April. Telford Taylor, *The March of Conquest* (New York: Simon and Schuster, 1958), 115-116.

³James L. Moulton, *A Study of Warfare in Three Dimensions* (Athens: Ohio University Press, 1967), 83.

⁴A Norwegian infantry battalion consisted of about 650 men, organized into a headquarters element, three rifle companies, and a machine gun company. The standard rifle was the Krag-Jorgenson bolt-action weapon. Each rifle company had six light machine guns (Hotchkiss or Madsen), and the machine gun company added two to four heavy Colt 7.92mm machine guns and two 81mm mortars. Ronald Tarnstrom, *The Sword of Scandinavia* (Lindsborg: Trogen Books, 1996), 136.

⁵Moulton, 83.

⁶The coastal defense ships were *Eidsvold* and *Norge* (1899 4th class battleships, 4,000 tons armed with eight 2 inch and five 9 inch guns), along with submarines B1 and B3. Tarnstrom, 132.

⁷United States Navy, *Information Bulletin* (Washington: Office of the Chief of Naval Operations, Naval Intelligence, 1940), 55.

⁸Although the 6th Infantry Division was only allotted one mountain artillery battery (eight 75mm pieces), the division had been reinforced by 77mm batteries for the “neutrality watch”, along with an additional two battalions of infantry. Tarnstrom, 137.

⁹Moulton, 222.

¹⁰A German mountain division at full strength counted 15,800 soldiers, and consisted of a recon battalion, two infantry regiments (of 3,064 soldiers each), an artillery regiment, an anti-tank battalion, an engineer battalion, a signal battalion, and headquarters and services troops. Military Intelligence Division, *Company Officer's Handbook of the German Army* (Washington: War Department, 1944), 112.

¹¹The exact composition of the force is in dispute, as some sources mention two complete battalions, and others pieces of all three. The size of the landing force at 2,000 men is consistent among all sources. James Lucas, *Hitler's Mountain Troops* (London: Arms and Armour Press, 1992), 27.

¹²Earl Ziemke, *The German Northern Theater of Operations* (Washington: Department of the Army, 1959), 46.

¹³No batteries were actually mounted here; the Germans found only the foundations to several blockhouses. *Ibid.*, 46.

¹⁴Bernard Ash, *Norway 1940* (London: Cassell, 1964), 50.

¹⁵Moulton, 82.

¹⁶United States Navy, 55.

¹⁷Jack Adams, *The Doomed Expedition* (London: Leo Cooper, 1989), 27.

¹⁸United States Navy, 56.

¹⁹Lucas, 29.

²⁰Moulton, 82.

²¹*Ibid.*, 83.

²²Adams, 29.

²³Ziemke, 46.

²⁴Lucas, 31.

²⁵The Swedes allowed “specialists” to use the rail line through their country into Narvik. These “specialists” included riflemen, demolition experts, and staff officers. A small amount of equipment and personnel were also delivered by airdrop/airland to the garrison, including a battery of mountain guns and a box of Iron Crosses. Historical Branch, Cabinet Office, *Notes on the Norwegian Campaign* (London: Her Majesty’s Stationary Office, 1951), 60-61.

²⁶The German destroyers, low on fuel, were attacked first by five British destroyers (the flotilla leader of these ships, Captain B.A.W. Warburton-Lee, was awarded the Victoria Cross for this action posthumously, the first awarded in the Second World War), then by a battleship and nine destroyers. All the German destroyers were sunk; some of the ten were beached to prevent sinking, while German divers salvaged some equipment from those that had sunk in shallow water. Thomas K. Derry, *The Campaign in Norway* (London: Her Majesty’s Stationary Office, 1952), 43-50.

²⁷Lucas, 32.

²⁸Francois Kersaudy, *Norway 1940* (London: Collins, 1990), 196.

²⁹This fort was armed with antiquated guns sited to defend against a Swedish invasion, but had an underground cross gallery and concrete observation posts surrounded by a trench for riflemen. Moulton, 131.

³⁰Hambarenes was armed with two 150mm guns; the two on the eastern side mounted two 210mm, two in one fort and three 150mm in the other, and two 65mm guns each. The rate of fire of these old pieces was very slow; three salvos every two minutes. Russ Folsom, Jason Pipes, and Mike Yaklich, “The Invasion of Norway (Operation Weserubung.),” Last accessed 4 April 2001, (<http://www.feldgrau.com/norwegian.html>, 2001), 14.

³¹Adams, 24.

³²Tarnstrom, 140.

³³The 5th Division included the 3rd Dragoon Regiment, 11th, 12th, and 13th Infantry Regiments, the 3rd Artillery Regiment (two light field artillery batteries and one heavy battery with a total twenty-four 77mm and twelve 120mm guns.), *Ibid.*, 138.

³⁴This unit consisted of two cyclist squadrons (battalions), a motorized machine gun troop (company), and an 81mm mortar troop. The administrative units in Trondheim included elements of the division headquarters and school company. Moulton, 165.

³⁵Ibid., 129.

³⁶All three battalions were short one infantry company. Historical Branch, Cabinet Office, 23.

³⁷Adams, 24.

³⁸Most of the artillery pieces and ammunition of the 5th Norwegian division were captured here and later employed by the Germans. Historical Branch, Cabinet Office, 23.

³⁹Folsom, 13-14.

⁴⁰Ash, 48.

⁴¹Paul Klatt, *Die 3. Gebirgs-Division 1939-1945* (Bad Nauheim: Verlag Hans-Henning Podzun, 1958), 31.

⁴²Kurt Assmann, The German Campaign in Norway: Origin of the Plan, Execution of the Operation, and Measures Against Allied Counter-attack (London: Tactical and Staff Duties Division (Foreign Documents Section), Naval Staff, Admiralty, 1948), 46.

⁴³Ash, 87.

⁴⁴Colonel Weiss, the commanding officer of the 139th Regiment, was killed during one of the failed assaults. Moulton, 132.

⁴⁵Ibid.

⁴⁶Ibid.

⁴⁷As of 14 April, the Norwegians estimated German strength in and around Trondheim at 3,000 troops in the process of being heavily reinforced by air (there was actually only the original force of 1,700 until late in the morning of 14 April, when an additional battalion landed by air.) Norwegian strength at this time consisted of 2,800 troops north of Trondheim (5th Division), 300 men at Hegra, and a further regiment plus supporting troops (1600 men) south of the town. Derry, 67.

⁴⁸United States Navy, 112.

⁴⁹

CHAPTER 7

CONCLUSION

Shortly before the German invasion of Norway, Prime Minister Neville Chamberlain of Great Britain remarked that Hitler had, “missed the bus” in squandering the opportunity to attack the western nations before those countries were fully prepared to resist. The brilliantly conducted Norwegian campaign, although overshadowed by the *Gelb* attack of the Low Countries and France, proved that the Hitler had a more highly developed sense of timing than Chamberlain perceived.

Conducted in the period just before the invasion of France, the successful forcible entry of Norway made the subsequent campaign possible. That campaign achieved the strategic aim of the German government to prevent British occupation of the Norway in whole or in part, using the minimum amount of assets. The Germans were successful in defending their operational center of gravity (the ability to transport forces and supplies by sea against the opposition of the British Royal Navy) while striking at the Norwegian (mobilization centers) and British (Royal Navy) centers of gravity. The Germans were successful both physically and psychologically using a variety of forces at widely geographically spaced decisive points in order to achieve a decision. These decisive points were the ports in the major population centers that contained the mobilization points, along with selected airfields. The ports and airfields, once seized, afforded the ability to strike at the Norwegian and British centers of gravity. The correct identification

of these decisive points, the formation of a command structure that facilitated cooperation between the German armed services, and the quality of the planning permitted the bold application of forces against those points. In contrast, the dilatory preparations and defensive plans of the Norwegians and the Allies were inadequate for the situation. The Allies failed to maintain a strategic aim, which led to far too many changes of plans, and the plans advanced were in many cases unrealistic. This blunder of Allied management, when added to the failure to integrate the services at the strategic level, ensured the Allied defeat.

During the entry of Norway, the Germans used new methods of operations to overcome both their inferiority on the sea and the distance from supporting airbases to the theater of operations. At sea, the Germans initially attempted to avoid battle with the superior Royal Navy by use of surprise to insert troops, then subsequently shielded their naval forces and lodgments by aircraft flying from airstrips captured by the ground troops. In the air, exploitation of technological advances allowed the use of airborne troops¹ and imparted the capability to reinforce lodgments rapidly via airlift, making it unnecessary (at least in the short term) to maintain a ground or sea line of supply to selected lodgments. Organization of a supporting structure that allowed air power immediate access to the theater was the enabler of the entire operation. Hitler, in command of the operation through his staff, served to unify the services concerning objectives and support, and made possible this integration of sea and air power.

The key lesson of this operation was its reliance on surprise. This element was instrumental in creating a battlefield environment that afforded the Germans the opportunity to conduct the forcible entry successfully. The element of surprise enabled

the invaders to operate in all mediums at an advantage. Using this advantage to the fullest, the Germans were able to land forces by sea, seize vital airfields, overcome initial Norwegian resistance with only the limited combat power they carried in their warships, while at the same time neutralizing Allied counter-measures to the invasion. Their planning stressed operational security measures to maintain strategic and operational surprise.

The second important lesson was the use of an effective psychological operations campaign, which clearly supported the key of surprise. The German use of psychological warfare to intimidate both the Norwegian population and government, while at the same time limiting the effectiveness of the Royal Navy, had a decisive impact on the entry operation. The most important element in the seizure of Oslo was the psychological advantage caused by surprise, not combat power. Through organization and training, the German force was able to generate sufficient combat power to accomplish all early entry objectives, while shortcomings in the supply system were mitigated by the flexible application of air and diplomatic power. The proclamation of a new government under Vidkun Quisling was a serious failure in the civil affairs domain, and provided the Norwegians the will to continue resistance.

Also deeply rooted in the element of surprise was the success of the German early entry forces in neutralizing the Norwegian defenses in the chosen lodgment areas. Without the use of surprise and speed on the part of the invaders, the Norwegian defense forces might have found it possible to repel the small forces landed in remote locations on the coast, or at least defeat in detail those limited forces in their restricted lodgments. Especially at Narvik, the German units were vulnerable to counterattack at the moment of landing, but

aggressive use of the limited forces available by General Dietl caused the Norwegians to overestimate his strength.²

The third lesson of the campaign was the importance of a unified command plan in executing the complex entry operation. Hitler's staff, the OKW, conducted all planning then commanded the operation to ensure coordination among the sea, air, and land services. This prevented, or at least minimized, the rivalry among the services. This cooperation among services was vital considering the inherent joint nature of the operation. The importance of this lesson is borne out in the failure of the British to adopt a similar method of control, with the attendant failures in the campaign due to lack of coordination at the strategic level.

The above lessons have relevance to today's operations. In current joint doctrine, the force conducting a forcible entry attempts to set "conditions that cripple the enemy's ability to decisively react to, or interfere with, the forcible entry operation."³ The actions of the Germans in 1940 validate current doctrine concerning setting the conditions for a forcible entry, but also display the interconnectedness of the items on the list. Each item is not absolute; it must be used in combination with the other precepts in order to be effective. Also, the manner in which each of the conditions is achieved differs with every situation based on the specific environment and the relation of forces on either side. Thus, in some cases, ground troops can accomplish control of the air by acting in concert with naval surface forces, while an essential component of isolating the chosen lodgment might rest upon an effective psychological campaign.

The air-sea-land forcible entry of Norway in 1940 utilized German operational innovation and boldness to secure victory. The Germans clearly understood and met the

conditions that were necessary to achieve that victory. The manner in which they attempted to solve the many operational and tactical problems of the attack are valuable examples to today's joint planners. These planners face the same daunting task of conducting complex joint forcible entry operations over great distances in support of the United States National Military Strategy. These planners may also have to contend with a similar set of problems and will be better able to generate ideas to solve those problems with this historical example of forcible entry as a guide.

4

¹Interestingly, General Kurt Student, the head of the German airborne troops, opposed the use of airborne troops in Norway. He felt that the use of the troops in Norway would alert the western powers to their operational capabilities, spurring them on to greater anti-landing defensive preparations on the eve of the great invasion in the west. United States Army Air Force, *Tactical Employment Troop Carrier Operations* Air Staff Post Hostilities Requirements on German Air Force (Headquarters, United States Army Air Forces in Europe, 1945), 154.

²The Norwegians estimated the on 11 April 1940 the number of German ground troops in the Narvik area was between 3,000 and 4,000 soldiers. The actual number was 2,000. Thomas K. Derry, *The Campaign in Norway* (London: Her Majesty's Stationery Office, 1952), 133.

³United States Department of Defense, JP 3-18 (Preliminary Coordination), *Joint Doctrine for Forcible Entry Operations* (Washington: Chairman of the Joint Chiefs of Staff, 2000), III-1.

⁴



Fig. 1. Route of Iron Ore via Norway. Source: Francois Kersaudy, *Norway 1940* (London: Collins, 1990), 16.



Fig. 2. Norwegian Rail Network. Source: Military Intelligence Service, *The German Campaign in Norway* (Washington: War Department, 1942), Map No. 1.

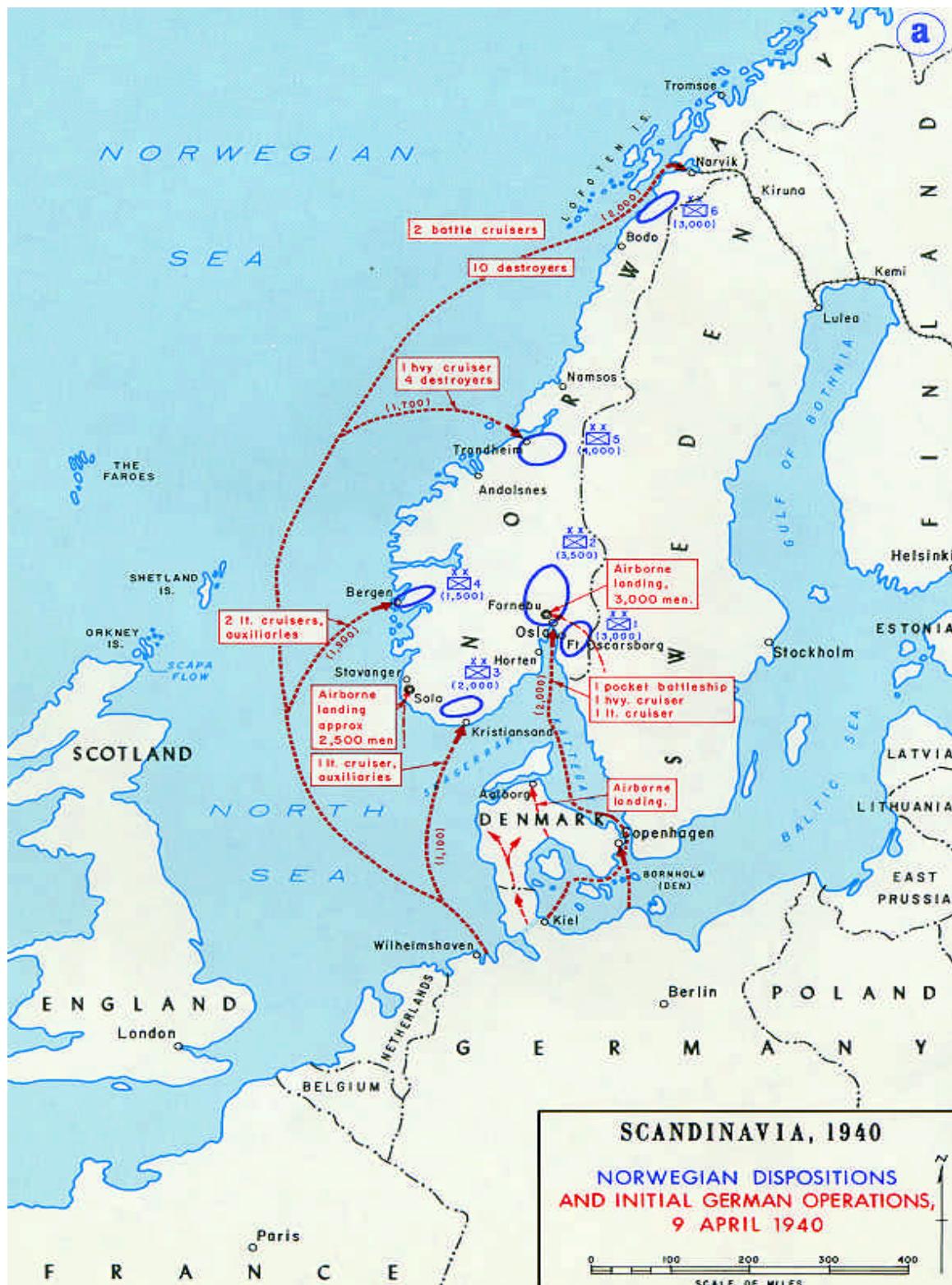


Fig. 3. German Invasion Plan and Norwegian Defense Forces. Source: Vincent Esposito, ed, *The West Point Atlas of American Wars* (New York: Praeger Publishers, 1959), Map 11A.

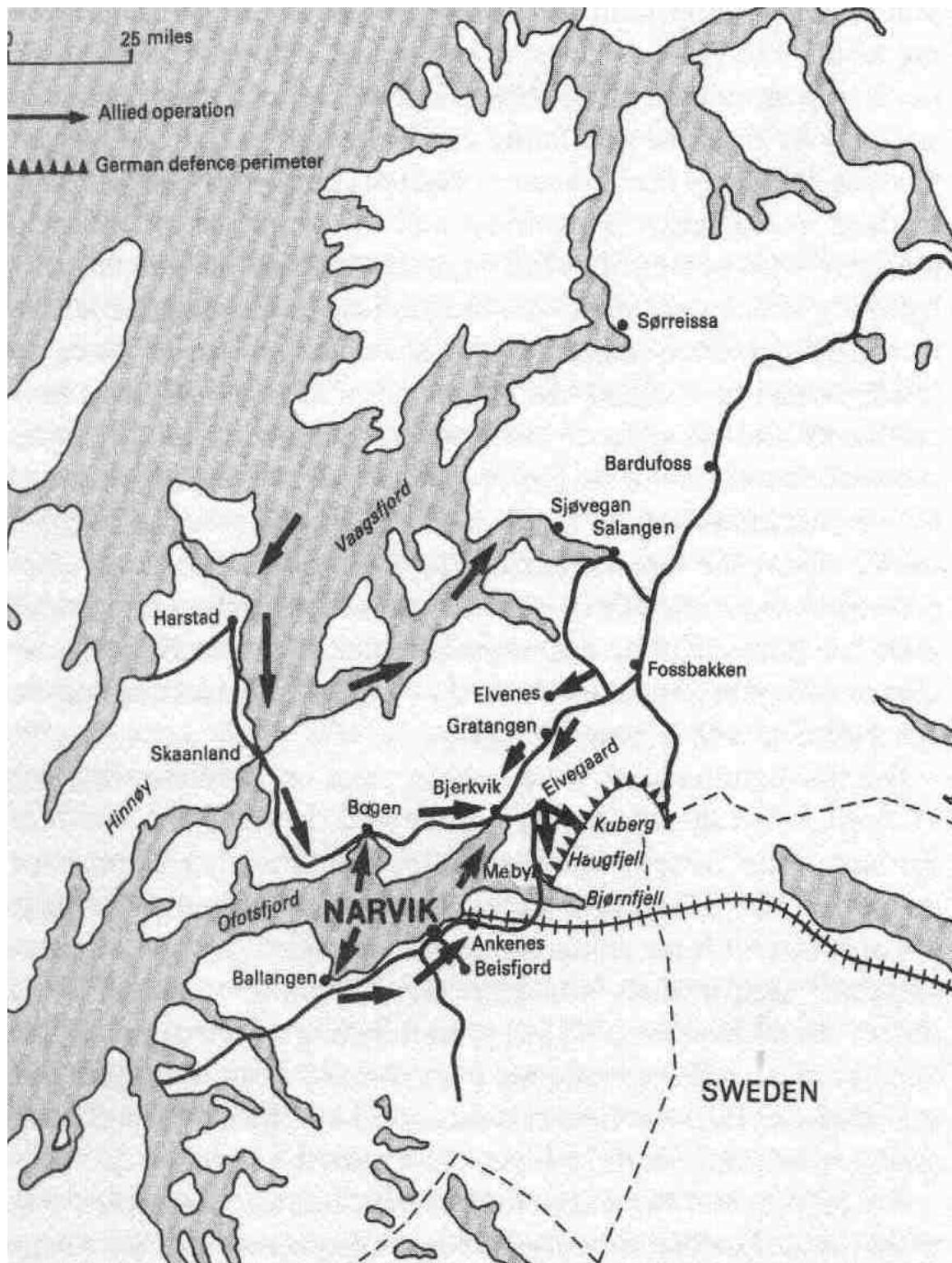
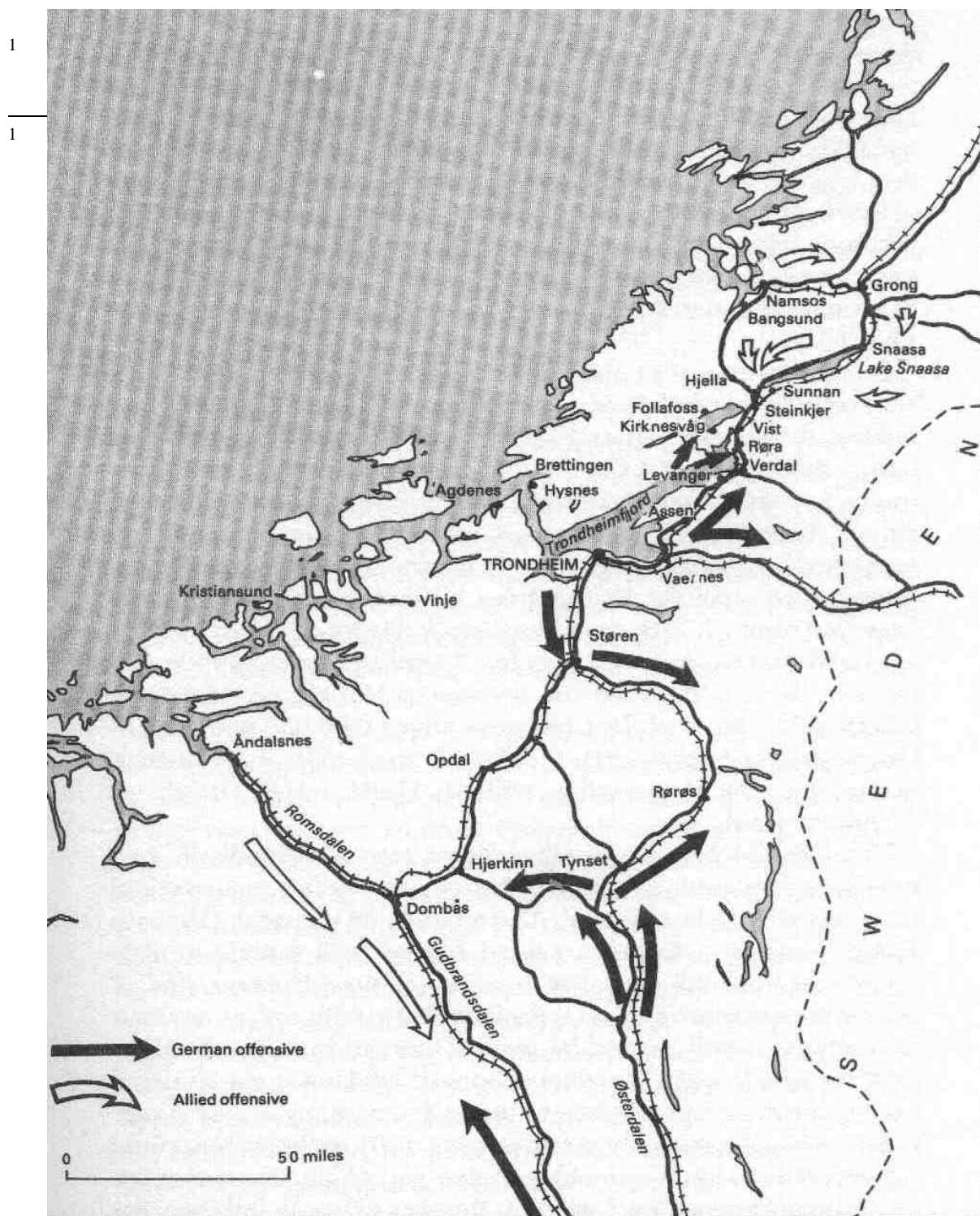


Fig. 4. Operations Around Narvik. Source: Francois Kersaudy, *Norway 1940* (London: Collins, 1990), 124.

Fig. 5. Operations Around Trondheim. Source: Francois Kersaudy, *Norway 1940* (London: Collins, 1990), 131.



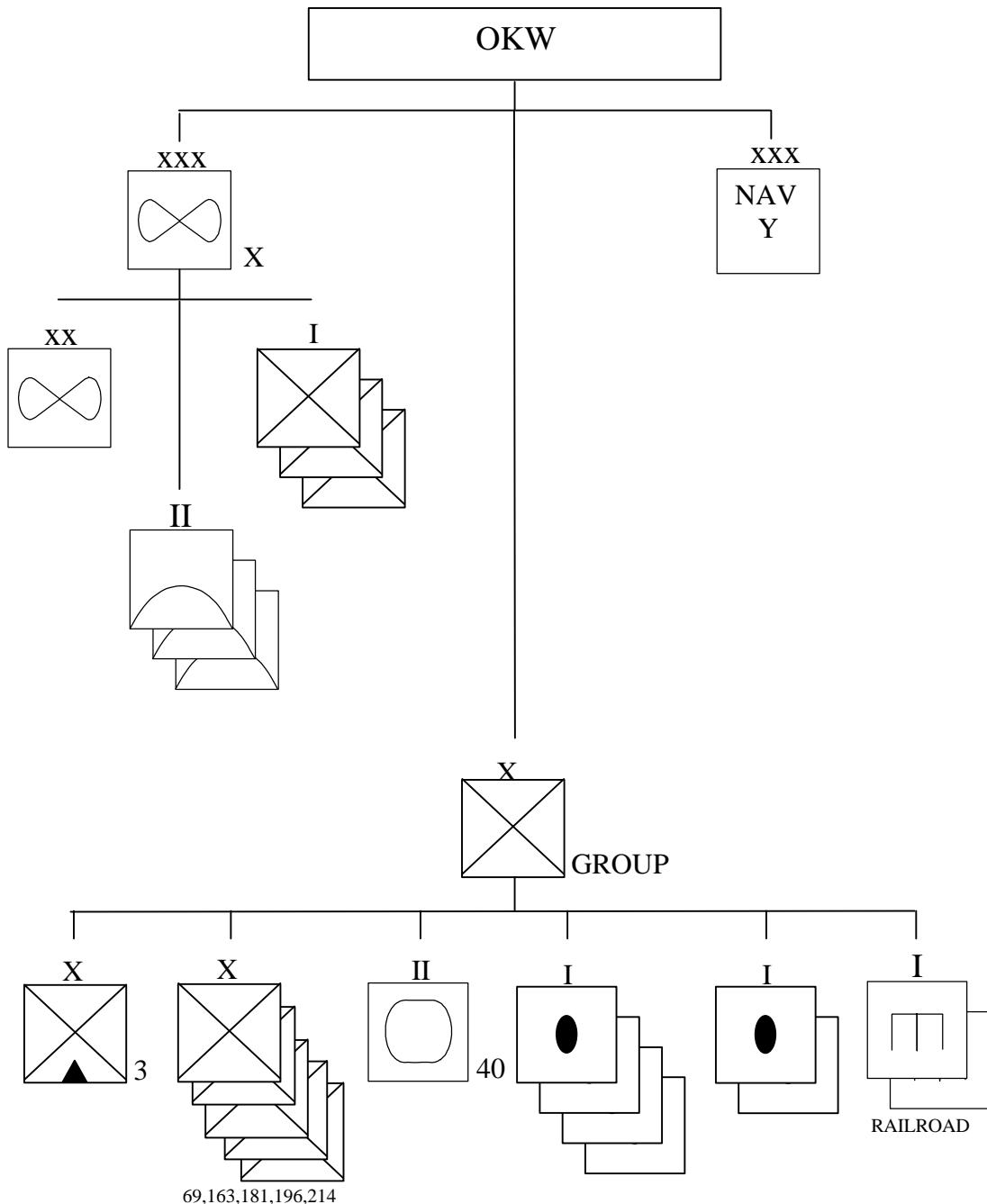


Fig. 6. Organization of German Forces in Norway. Source: Earl Ziemke, *The German Northern Theater of Operations* (Washington: Department of the Army, 1959), 33.

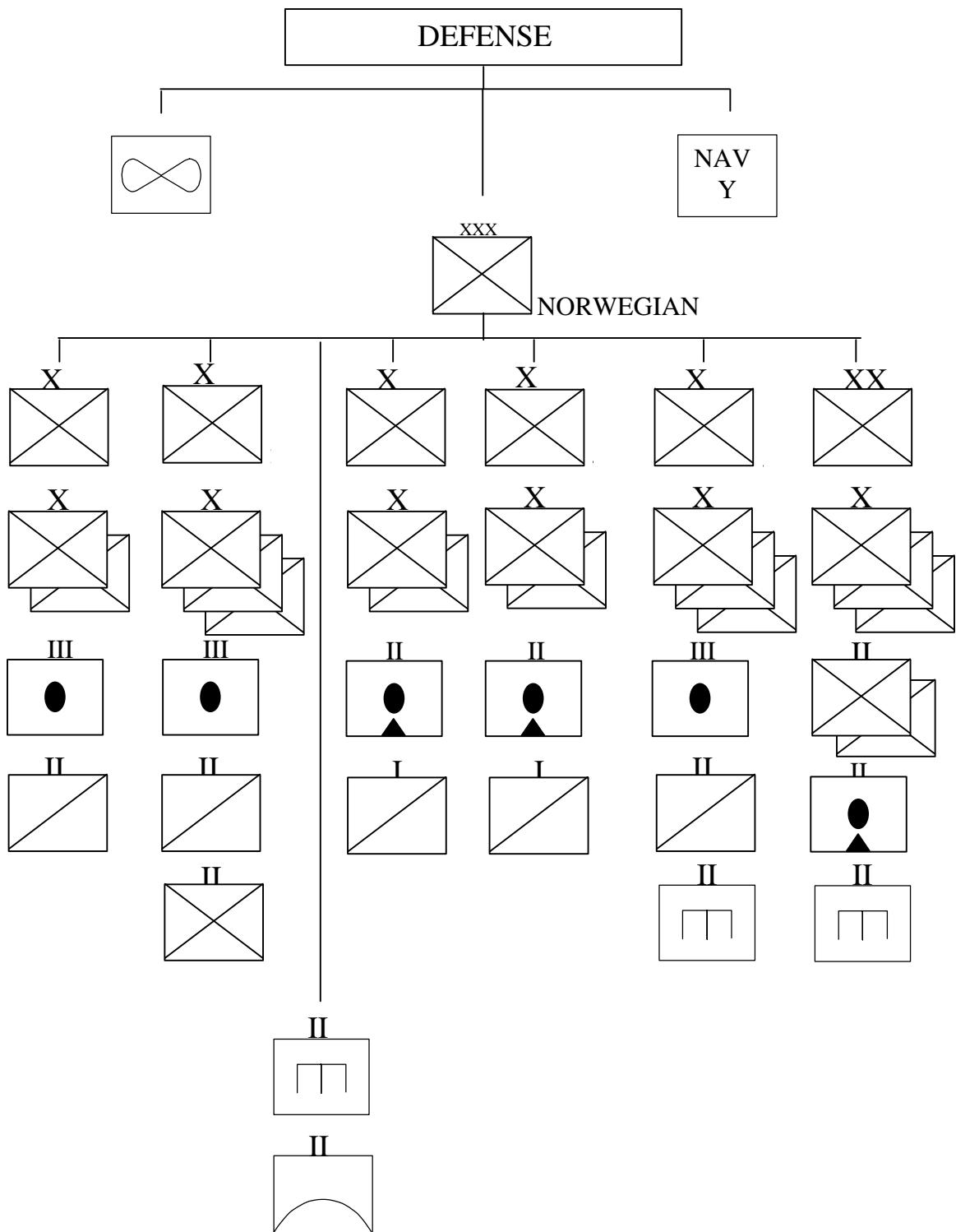


Fig. 7. Organization of Norwegian Forces. Source: Ronald Tarnstrom, *The Sword of Scandinavia* (Lindsborg: Trogen Books, 1996), 138.

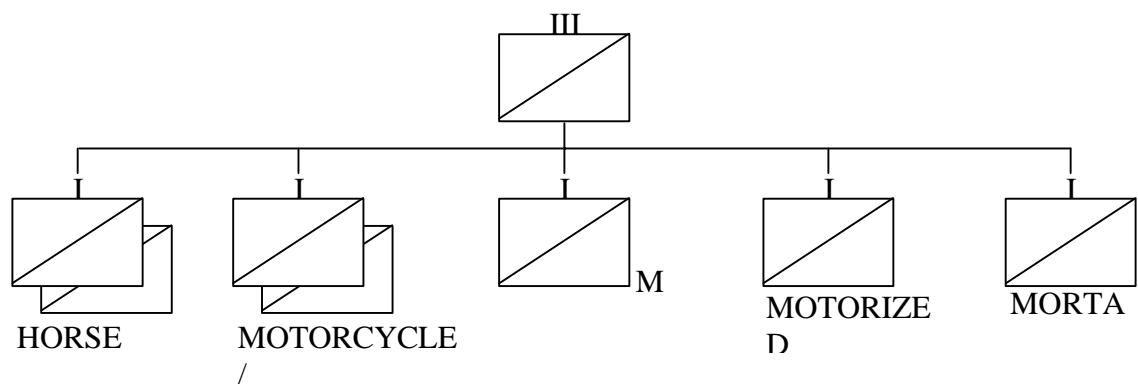
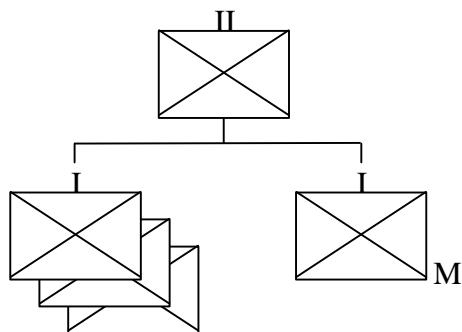
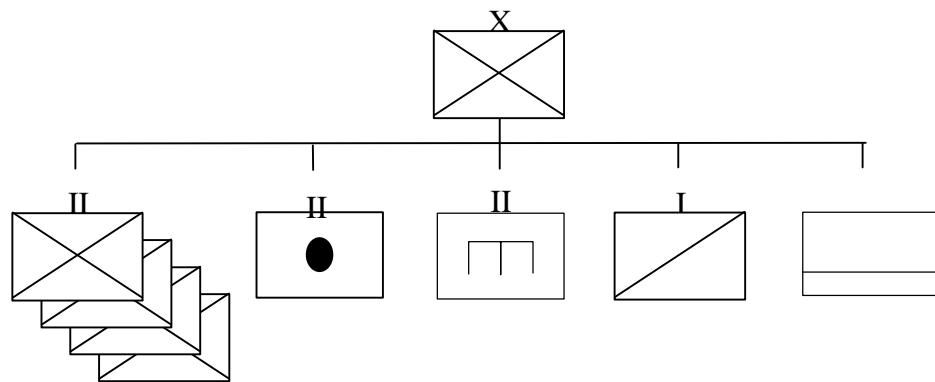


Fig. 8. Organization of Norwegian Brigade, Battalion, and Dragoon Regiment.
 Source: Ronald Tarnstrom, *The Sword of Scandinavia* (Lindsborg: Trogen Books, 1996), 139-142.

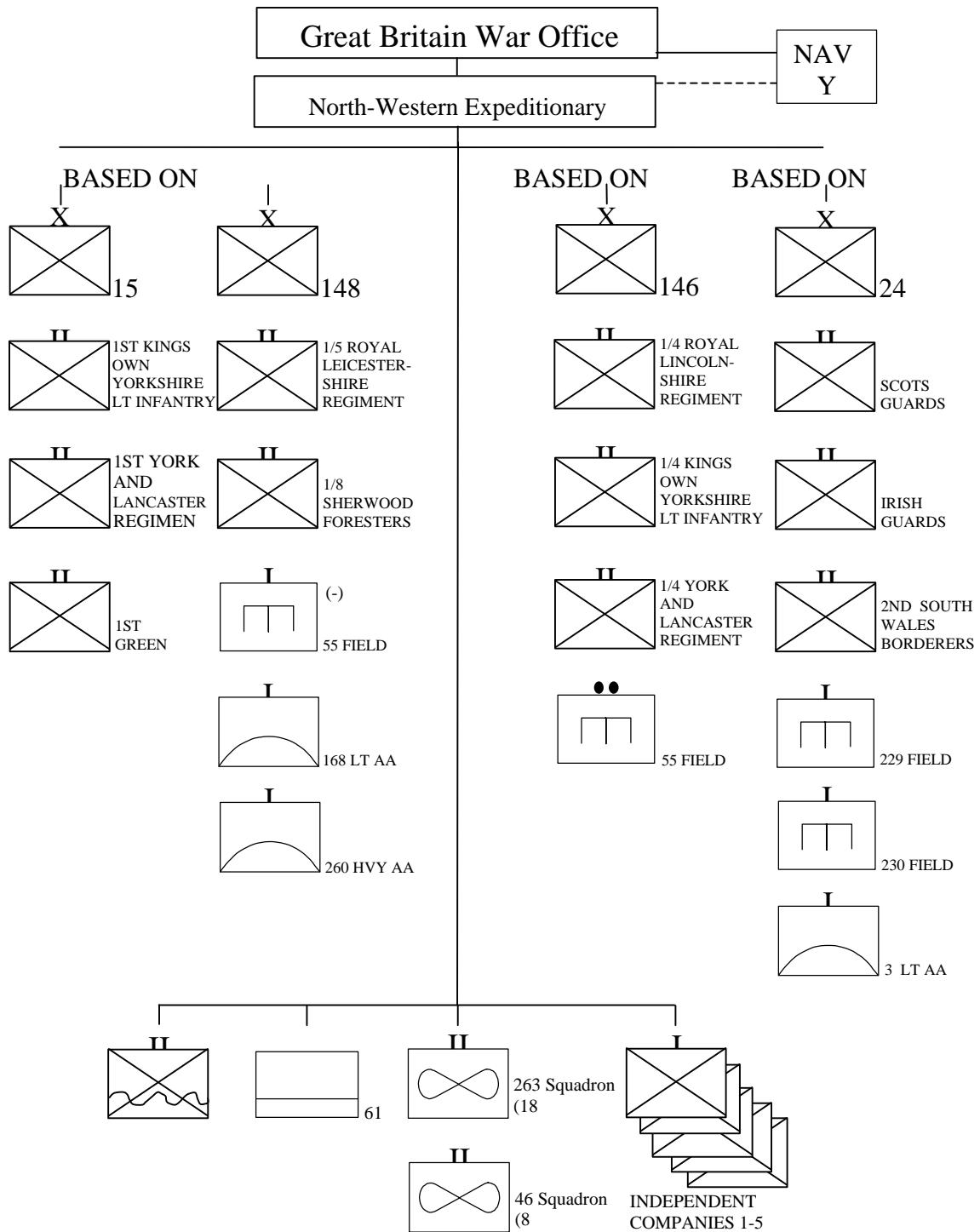
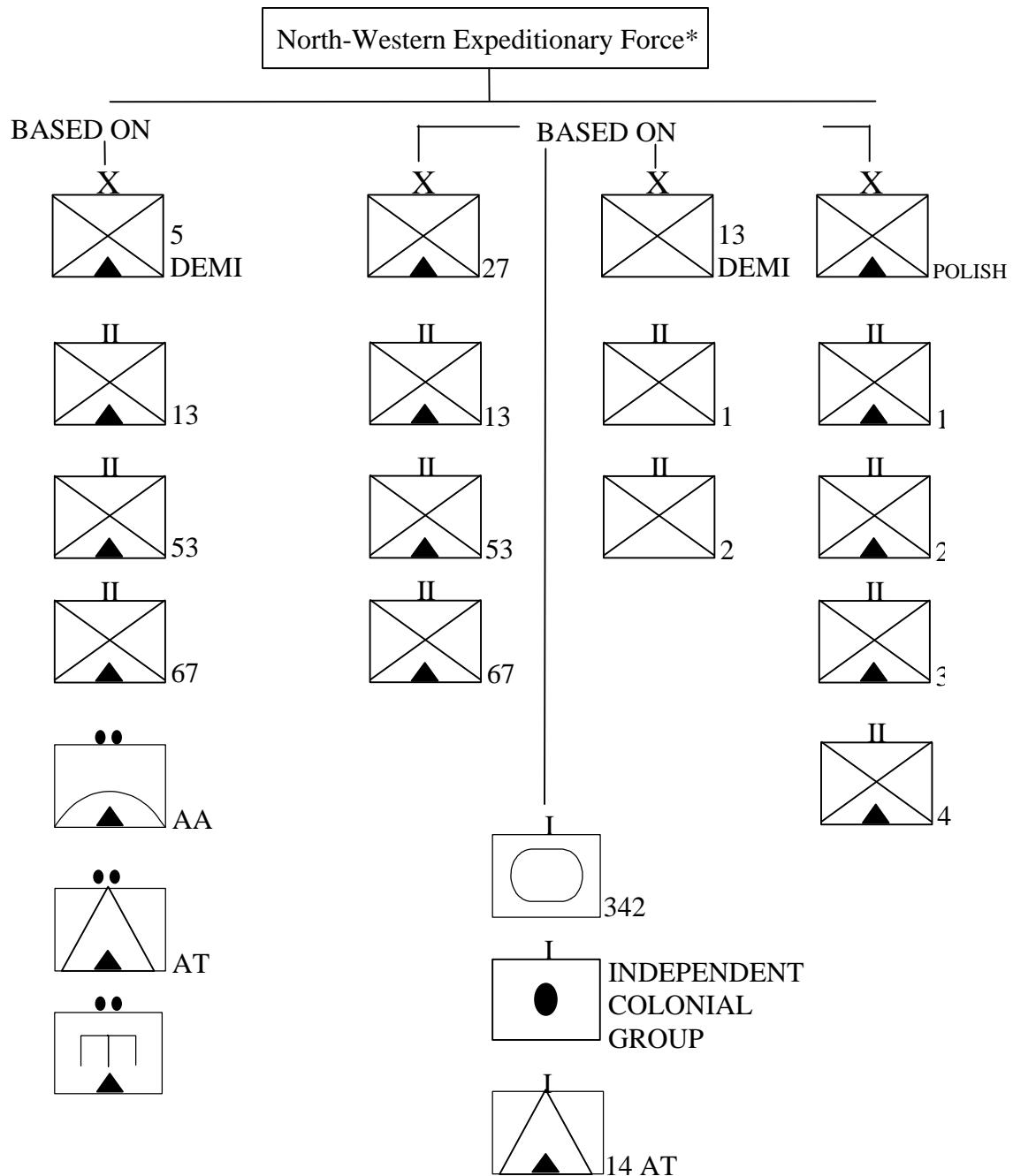


Fig. 9. Organization of British Forces in Norway. Source: Thomas K. Derry, *The Campaign in Norway* (London: Her Majesty's Stationery Office, 1952), 263-267.



*French units were subordinate to the British command in the geographical areas of operation.

Fig. 10. Organization of French Forces in Norway. Source: Thomas K. Derry, *The Campaign in Norway* (London: Her Majesty's Stationery Office, 1952), 263-267.

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